

**The Contrast-dependent CI-Calculation of Topic and Focus
in Korean Transitive Constructions**

by

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To my mother who gave me language
(1947 - 2010)

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List of Abbreviations

Types of Phrases

CP	Complementizer phrase	TopP	Topic Phrase
FocP	Focus Phrase	TP	Tense phrase
vP	Light verb phrase	VP	Verb phrase
DP	Determiner phrase	NP	Noun phrase

Types of Morphemes

Top	Topic particle	Foc	Focus particle
Cont	Contrast particle	Nom	Nominative
Acc	Accusative	Gen	Genitive
Dat	Dative	Past	Past tense
C	Complementizer	Prog	Progressive
Decl	Declarative	Nmlz	Nominalizer
Neg	Negation	RPOR	Reportative
Loc	Locative		

Others

NS	Narrow Syntax
CI	Conceptual-Intentional interface
SM	Sensory-Motor interface
Lit	Literal Translation

Chapter 1

Goals and Organization

1.1 Goal of the Thesis

Prevailing analyses of Noun Phrases with a topic or focus interpretation in the literature of the Minimalist Program depend heavily on a syntactic projection (e.g., Topic Phrase) or a syntactic feature (e.g., [+foc]) dedicated to Topic or Focus. For example, Rizzi (1997) utilizes both a Topic Phrase and a Focus Phrase to account for a topic and focus interpretation of Noun Phrases. Miyagawa (2010), another influential work on Topic and Focus within the Minimalist Program, also employs the notion Focus as a syntactic feature that operates in the syntax.

This dissertation, contrary to the prevailing analyses briefly described above, aims to present an alternative account of Noun Phrases with a topic or focus interpretation. In the account, I argue, without appealing to a syntactic projection or feature dedicated to Topic or Focus, that a topic or focus interpretation of Noun Phrases is calculated and determined at the Conceptual-Intentional interface by means of the structural properties of Noun Phrases.

To achieve this goal, this dissertation explores Topic- and Focus-related interpretations of Noun Phrases in typical transitive constructions in Korean and proposes that the presence of a contrastively marked Noun Phrase, whether it is Topic or Focus, plays a crucial role in determining a topic or focus interpretation of Noun Phrases in Korean.

1.2 Object of Inquiry

Before we proceed, it is worthwhile to reiterate and re-emphasize the scope of the dissertation. Our discussion in this dissertation about a topic/focus interpretation of Noun Phrases is limited to 'typical transitive constructions in Korean'. By 'typical' I refer to the transitive constructions where the (transitive) verb takes two Noun Phrases as its arguments, i.e., the subject (or the external argument) and the object (or the internal argument). These limitations exclude many other different, important constructions: to name a few, our discussion does not include the transitive constructions taking a 'clausal' complement, intransitive constructions, or ditransitive constructions. Furthermore, our discussion does not include languages beyond Korean, although I will occasionally point out some similarities observed between Korean and Japanese.

I confine our discussion to these simple or 'typical' transitive constructions mainly because introducing more complex cases such as ditransitive constructions and transitive constructions with an embedded clause will at this stage of the study only make the issue more difficult and more complex than it is already. It should be noted at the same time, however, that ignoring those (more) complex cases does not mean that I think they are unimportant or uninteresting and I hope that future research can extend to those more complex cases as well as to other languages, especially the languages that belong to a different language family from Korean.

Now to the object of inquiry for our discussion. Suppose first that *John* and *Mary* are both linguistics graduate students at the same university and they know each other very well. Suppose further that while being interviewed by a reporter from the campus newspaper, *Mary* is asked to tell something about *John* and she says (1) below.

- (1) (Context: *Tell me about John.*)
A: John studies syntax.

For now, let us call Topic an NP that a statement is about. Then, the Topic NP in (1A) is the subject *John*¹ because the statement refers to something about *John*. Notice that the primary stress in this case falls on the object *syntax*.

Suppose now that *Mary* is later asked the following question in (2Q) by a different reporter from the same newspaper and she responds as in (2A):

- (2) Q: Who studies syntax (in your department)?
A: John (studies syntax)².

Let us call Focus an NP that corresponds to the *wh*-part of a preceding *wh*-question. So construed, the Focus NP in (2A) is the subject *John* (with a primary stress), the rest being the presupposition (or background information).

Notice that despite the fact that both (1A) and (2A) have the same word order and share the same propositional content (i.e., a person whose name is *John* studies a subfield of linguistics called syntax), the sentence in (1A) with *John* as the Topic and the primary stress on *syntax* cannot serve as a felicitous answer to the question in (2Q) and neither can (2A) to the request in (1).

¹ Using the pronoun *he* instead of reiterating *John* as the subject would sound more natural. Even so, however, the use of *John* does not make the statement in (1) infelicitous to the request ‘tell me something about John’. The same applies to (2), i.e., the use of the pronoun *it* instead of *syntax* would sound more natural.

² As with the use of proper noun *John* in (1A), saying ‘John does’ or simply ‘John’ would be a more natural answer to the question in (2). Nonetheless, the answer ‘John studies syntax’ does not make itself an infelicitous answer to the given question.

With the same scenario described for (1) and (2), let us now examine Korean whose canonical word order is SOV. First, when asked to tell something about *John*, *Mary* says (3a):

- (3) (Context: *Tell me about John*)
 ‘John studies syntax.’
- | | | | |
|----|------------------------------------|----------------|--------------|
| a. | John ³ -un ⁴ | sinthayksu-lul | kongpwuhanta |
| | J.-UN | syntax-Acc | studies |
| | S | O | V |
- | | | | |
|----|----------|----------------|--------------|
| b. | #John-i | sinthayksu-nun | kongpwuhanta |
| | J.-Nom | | |
| | S | O | V |
- | | | | |
|----|----------------|----------|--------------|
| c. | #sinthaysu-lul | John-un | kongpwuhanta |
| | O | S | V |
- | | | | |
|----|----------|----------------|--------------|
| d. | #John-i | sinthayksu-lul | kongpwuhanta |
| | S | O | V |
- | | | | |
|----|-----------------|----------|--------------|
| e. | #sinthayksu-lul | John-i | kongpwuhanda |
| | O | S | V |

As indicated in the English translation in (3), all the four sentences in (3a-e) share the same propositional meaning, i.e., ‘a person whose name is *John* studies a subfield of linguistic called syntax’. Nonetheless, only (3a), where the subject *John* is marked with the particle ‘-un’ and the object *sinthayksu* ‘syntax’ is Case-marked, can serve as a felicitous response to the request. Furthermore, the subject *John* in this case must precede the object *sinthaysu* ‘syntax’; if one of the two requirements

³ Unlike English, using *John* instead of the pronoun *he* in this case sounds more natural in Korean.

⁴ I gloss the so-called Topic marker -(n)un as it is here. The choice between -un and -nun is determined phonologically: the former is used when the preceding syllable ends in a consonant and the latter when it ends in a vowel.

(i.e., the structural position of and the morphological marking on the NPs) is not met, the resultant sentence cannot serve as a felicitous response to the request as illustrated in (3b - 3e).

Consider now the answers to the question *who studies syntax*:

- (4) (Context: *Who studies syntax*?)
- | | | | |
|----|----------------|----------|--------------|
| a. | sinthayksu-nun | John-i | kongpwuhanta |
| | syntax-NUN | J.-Nom | studies |
| | O | S | V |
- | | | | |
|----|-----------------|----------|--------------|
| b. | #sinthayksu-lul | John-un | kongpwuhanta |
| | O | S | V |
- | | | | |
|----|----------|----------------|--------------|
| c. | #John-i | sinthayksu-nun | kongpwuhanta |
| | S | O | V |
- | | | | |
|----|----------|----------------|--------------|
| d. | #John-i | sinthayksu-lul | kongpwuhanta |
| | S | O | V |
- | | | | |
|----|-----------------|----------|--------------|
| e. | #sinthayksu-lul | John-i | kongpwuhanda |
| | O | S | V |

Notice again that if the particles on each NP or the structural position between the two NPs are switched as shown in (4b - 4e), no sentence can serve as a felicitous answer to the question '*who studies syntax*?' Only (4a), where the *nun*-marked object *sinthaysu* 'syntax' precedes the Case-marked subject *John*, can serve as a felicitous answer.

To see the major differences between the two languages (i.e., English and Korean) in terms of how topic/focus-related interpretations of NPs are encoded in a sentence, let us repeat the relevant sentences:

- (5) a. John studies syntax. (=1, response to *'tell me about John'*)
 b. John studies syntax. (=2, answer to *'who likes syntax'*)
- (6) a. John-un sinthayksu-lul kongpwuhanta. (= 3a, response to *'tell me about John'*)
 J.-UN syntax-Acc studies
 b. sinthayksu-nun John-i kongpwuhanta. (= 4a, answer to *'who likes syntax?'*)
 syntax-NUN J.-Nom studies

In English, prosody alone can alter the topic/focus-related interpretation of an NP in the same sentence. In other words, a change in topical/focal structure of a sentence in English does not need to be accompanied by a change in word order and/or morphology.⁵ Therefore, the sentence 'John studies syntax' can be ambiguous in English if, for example, it is presented in isolation, especially in a written form, without any context given.

In Korean, however, along with prosody, the appropriate word order and morphology (i.e., the type of particle attached to an NP) are required to properly encode the topicality/focality of an NP. In most cases, an NP must occur in the clause-initial position with the particle *-(n)un* to be interpreted as Topic, whereas it must occur in non-clause-initial position with a Case marker to be understood as Focus. If an NP in a sentence does not meet one of these requirements (i.e., the structural position and the morphological marking), it will make the sentence sound infelicitous as exemplified in (3b - 3e) and (4b -4e). Therefore, unlike in English, the sentences in (6a,b), where each NP occurs in a particular word order with a particular particle, are not ambiguous even when presented in isolation (in a written form) without any given context.

What we have discussed so far seems to suggest that in Korean, topic/focus-related interpretations of an NP is not just a matter of phonology (i.e., the

⁵ Of course, it does not 'exclude' those possibilities.

Sensorimotor (SM) interface) but also morpho-syntactic phenomena (i.e., Narrow Syntax). If 1) the role of the Computational System of Human Language (C_{HL} i.e. syntax proper) is to provide each of the interpretive systems (i.e. SM and CI) with appropriate instructions for expressions generated, and 2) C_{HL} is indeed ‘optimized relative to the CI interface with mapping to the SM interface an ancillary process (Chomsky 2007, 2008)’, topic/focus-related information of an NP may well be encoded by C_{HL} so that CI can interpret it as such. The primary object of inquiry for this dissertation is thus to examine how topic/focus-related interpretations of an NP in Korean are encoded in syntax proper and interpreted as such at the CI-interface.

1.3 Organization of the Dissertation

The dissertation is composed of six chapters. Following Chapter 1 “Goals and Organization,” Chapter 2 “Theoretical Background: the Minimalist Program” presents a brief overview of the Minimalist Program within which this dissertation is framed. In this overview, we focus on (some of) the major questions that the Minimalist Program raises along with the essential theoretical mechanisms proposed and employed in the (most) current Minimalist Program. Chapter 3 “Topic, Focus and the Minimalist Program” is devoted to introducing, clarifying and defining the two notions, Topic and Focus. In so doing, subtypes of Topic and Focus will be introduced such as Contrastive Topic and Contrastive Focus. The chapter also provides a review of two of the most influential analyses of Topic and Focus within the Minimalist Program, i.e., Rizzi (1997) and Miyagawa (2010) where the authors associate a topic or focus interpretation of Noun Phrases with a syntactic feature or projection operating in the Narrow Syntax. Focusing on typical

transitive constructions in Korean, Chapter 4 “Topic, Focus and their Subtypes in Korean: Descriptive Analysis” presents a detailed descriptive analysis of how the two notions, Topic and Focus, and their subtypes are realized in Noun Phrases in Korean and how their interpretations are related to their structural properties. In so doing, I classify 1) the notion Topic into two different subtypes, i.e., Contrastive Topic and Plain Topic, and 2) the notion Focus into two different subclasses, i.e., Contrastive Focus and Information Focus. Based on the descriptive analysis advanced in Chapter 4, Chapter 5 “Structural Analysis” provides a detailed structural analysis of the realization of Topic and Focus Noun Phrases in transitive constructions in Korean. Chapter 6 summarizes the study and presents some speculation on the realization of Topic/Focus in intransitive constructions in Korean.

Chapter 2

Theoretical Background: the Minimalist Program

2.1 Introduction

This chapter provides a brief overview of the goals of generative grammar and its most current theoretical outgrowth, the Minimalist Program, within which the dissertation is framed. The chapter especially focuses on the minimalist's view on the notion 'language' and the two essential research questions that has become the driving force of the development of the Minimalist Program.

This chapter is organized as follows: Section 2.2 presents the minimalist's views on the notion 'language' and the resultant object of inquiry of generative grammar. Focusing on the two essential research questions, Section 2.3 presents a brief overview of the architecture of the Minimalist Program. Section 2.4 considers (the minimalist's answer to) the question of why the minimalist especially focuses on the understanding of the conditions that are external to the human Faculty of Language. Section 2.5 briefly overviews core mechanisms proposed and employed in the Minimalist Program.

2.2 Generative Enterprise: Object of Inquiry

Seeking generalizations from technical analysis of various language data had long been the central focus of interest in linguistics until generative grammar was born

in the midst of what is later referred to as the ‘Cognitive Revolution’ in the mid 1950’s. Pioneered by Chomsky (1957, 1965), generative grammar views language, neither as a culturally specific communication system (e.g., English, Korean, etc.) nor “the totality of utterances that can be made in a speech community” (Bloomfield 1926: 155), but as a biological cognitive/computational system rooted in the evolution of the human species. Consequently, generative grammar shifted the primary object of inquiry of linguistics from seeking generalizations through technical analysis of various language phenomena to the study of the (core) nature of a cognitive system for the human capacity for language. This cognitive system, commonly referred to as the ‘Faculty of Language (FL),’ is argued to be species-specific and domain specific, i.e., it is a biologically unique human endowment and “dedicated to the use and interpretation of language” (Chomsky 2000b: 168; cf. Hauser, *et al.* 2002¹, Fitch, *et al.* 2005). The goal of generative grammar is thus to discover the (core) principles that constitute the human capacity for language.

Since its birth in the mid 1950’s, generative grammar has undergone several major revisions² and its most current framework is called the ‘Minimalist Program.’

¹ Hauser, *et al.* (2002) propose to make a distinction between FLN (the Faculty of Language in its narrow sense) and FLB (the Faculty of Language in its broad sense). They hypothesize that FLN, a subcomponent of FLB, includes only ‘the abstract linguistic computational system’ and is unique to humans, while FLB includes at least two other organism-internal systems, namely, ‘the sensory-motor and the conceptual-intentional systems,’ and is argued to be shared with other species.

² A later theoretical framework of generative grammar was often called by a different name when the revisions made to its predecessor were so radical (e.g., the ‘Standard Theory’ in the 60’s vs. the ‘Government and Binding Theory’ in the 80’s). It should be noted, however, that different names on each theoretical framework do not mean that a later theory came along by abandoning its predecessor to its entirety. Rather, as Chomsky (p.c.) notes, each theoretical framework of generative grammar, by whatever it is called, is “a *seamless continuation* of pursuits of generative grammar that trace back to the origins of generative grammar.”

In what follows I present a brief sketch of the central tenets of the Minimalist Program and its core mechanisms.

2.3 The Minimalist Program: Architecture

The Minimalist Program (MP) initiated by Chomsky (1993, 1995) is the most recent outgrowth of the theory of generative grammar³ and its most essential topic and hence its major driving force originates from the following two related questions (adapted from Chomsky 1995, Introduction and Chomsky 2005: 9):

- (1) What are the general conditions that FL should be expected to satisfy?
- (2) To what extent does FL approximate an optimal solution to these conditions?

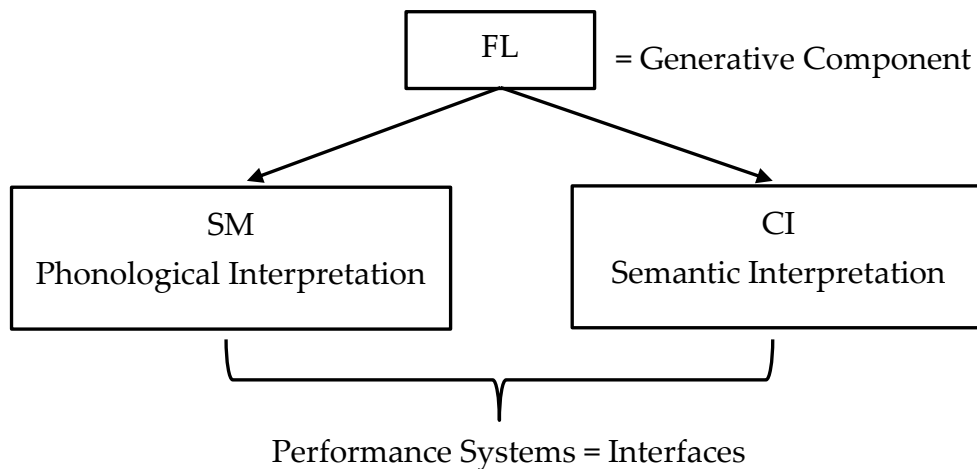
Consider first Question (1) which consists of two parts. As briefly described in Section 2.1., the MP views language as a biological cognitive/computational system, calling it the Faculty of Language (FL). This FL is assumed to undergo state changes from the genetically determined initial state S_0 to an attained state S_n (Chomsky 2000a). The shared initial stage of FL (or a (core) theory of it) is often called ‘Universal Grammar (UG)’ and each attained state of FL (including S_0) is called a (possible) ‘Internal language (I-language).’

The MP further hypothesizes that linguistic expressions generated by FL are sent over to two other cognitive systems called ‘interface (or performance) systems.’ The suggested two interface systems that interface with FL are the ‘sensorimotor

³ The MP is called a ‘program’ as opposed to a (fully developed) theory because as Boeckx (2008: 84) puts it, the MP in itself is not an attempt to “provide exhaustive explanations for observed linguistic phenomena” but “merely outlines a number of research goals which guide the development of a given theory.”

system (SM)' for phonetic/phonological interpretation and the 'conceptual-intentional system (CI)' for semantic interpretation, both of which are assumed to be organism-internal but FL-external. The relationship described between FL and SM/CI can be depicted as follows:

(3) Architecture of the MP



Given the assumption that linguistic expressions generated by FL are sent over to each of the interfaces for relevant interpretation, it is reasonable to assume that these linguistic expressions must be 'legible' or accessible to these interfaces; otherwise, the linguistic expressions will not be able to receive proper interpretation. In the MP, this legibility of linguistic expressions generated by FL in relation to the interfaces is formulated as a condition imposed on FL by each interfacing system, collectively called 'interface (or legibility)' conditions. One type of condition FL should be expected to satisfy (i.e., an answer to Question (1) above) is thus these interface conditions imposed by the two FL-external systems.

The other condition proposed is not just 'external' to FL but even more general in its nature because it is assumed to be operative not only in the design of FL but

also in other biological systems. The following three factors are what Chomsky has been proposing enter into the growth and development of FL (as well as of other biological organisms) (Chomsky 2004 *et. seq.*):

(4) Three Factors

- I. Genetic Endowment
- II. Experience/External Data⁴
- III. Organism-independent Principles

Factor (I) refers to the initial state of FL itself (i.e., UG), which Chomsky (2006: 180) claims allows an individual to “interpret part of his environment as linguistic experience” and “determines the general course of the development of FL.” Hence, one of the tasks of the MP is to identify and clarify what constitutes UG. Factor (II) is what is responsible for state change of an individual’s FL from the initial state S_0 to an attained state. In other words, an individual’s initial FL leads to “[I-language] variation within a narrow range” as s/he is exposed to ‘primary linguistic data (PLD)’ (Chomsky 2005: 6). As for Factor (III), commonly referred to as the ‘third factor,’ Chomsky claims that among others⁵, principles of ‘efficient computation’ is of particular significance for computational systems such as FL. These principles are not only external to FL but also more broad and general in its nature in that as Chomsky (2006: 180, 2010: 51) writes, they “enter not only into the growth of

⁴ In his earlier papers, Chomsky uses the term ‘(Individual) Experience’ to refer to Factor (2) and identifies it with ‘Primary Linguistic Data (PLD)’ (Chomsky 2004, 2005). The term ‘External Data’ is what Chomsky uses in his later papers to refer to Factor (2) (Chomsky 2007, 2008, 2013).

⁵ Other organism-independent principles include ‘data processing (Chomsky 2005)’ and “properties of the human brain that determine what cognitive systems can exist (Chomsky 2007).”

organisms but also their evolution, providing architectural[-structural] constraints that limit adaptive scope and channel evolutionary patterns.”

In sum, the minimalist answer to Question (1) ‘what are the general conditions that FL should be expected to satisfy?’ is that it satisfies two FL-independent conditions, namely, interface conditions imposed by performance systems and (organism-independent) principles of efficient computation.

As for Question (2) ‘to what extent does FL approximate an optimal solution to these conditions?,’ the MP hypothesizes that FL is designed to perfectly satisfy those conditions, which is formulated as a central thesis of the MP called the Strong Minimalist Thesis (SMT, adapted from Chomsky, 2013: 38):

(5) **Strong Minimalist Thesis (SMT)**

FL is a perfect solution to interface conditions and principles of efficient computation.

2.4 Why FL-external?

One may wonder why FL is designed so as to be constrained, not by its own principles but by those *external* to it. In other words, one might ask how such a claim can be justified. To answer these questions, we need to consider the proposals on the origin of the human language faculty.

Though controversial, it has been argued by many archaeologists and paleoanthropologists that the crystallization of complex human capacities can be attributed to the invention of language (Bar-Yosef 2002, Diamond 1997) and Chomsky (2005) suspects that the emergence of the human faculty of language was presumably the result of a sudden small genetic mutation that took place between

100,000 and 50,000 years ago among a small breeding group of which we are all descendants.

If the genetic mutation, which led to the emergence of the faculty of language, was indeed a small, sudden and very recent event (from an evolutionary point of view), it is reasonable to suppose that the content of the genetic mutation (i.e., the initial state of FL = UG) could not have been rich and complex. Rather, it must have been some ‘slight’ rewiring of the brain as Chomsky (2011) suggests.

If these speculations are on the right track, inquiry into the origin of FL would become more feasible, the less special apparatus is attributed to genetic information (i.e., UG). In fact, the MP hypothesizes that properties of I-languages can be given a ‘principled’ (or ‘genuine’) explanation only if they can be accounted for, not in terms of apparatuses internal to FL, but in terms of conditions and principles motivated by FL-external considerations, namely, interface conditions and computational efficiency.

2.5 The Minimalist Program: Core Operations

2.5.1 Merge

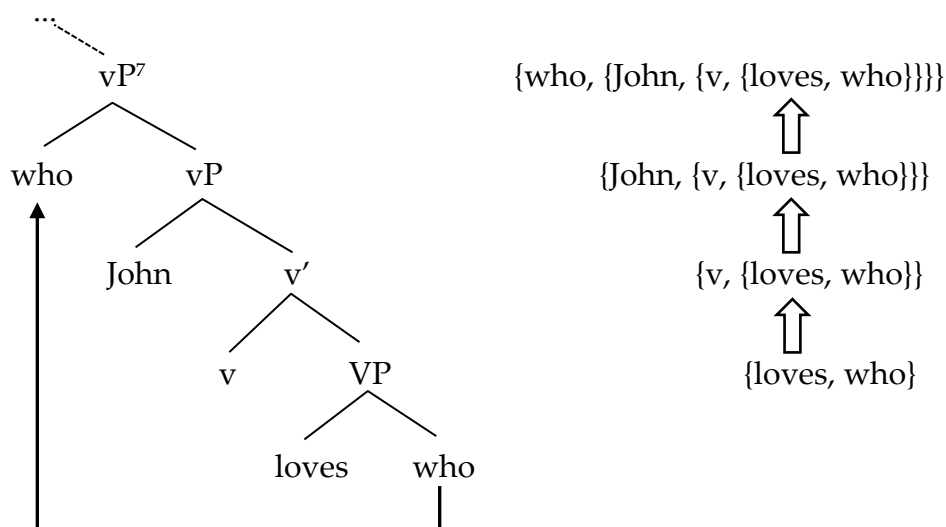
As is well known, FL is a system of discrete infinity consisting of hierarchically structured objects: in principle, there is no upper limit on the length of a sentence. To capture this property of discrete infinity of language, the MP utilizes the operation called ‘Merge,’ which takes two Syntactic Objects (SOs), X and Y, and forms a set {X, Y} from them.⁶ Structure building in the MP proceeds in a bottom up fashion by recursive application of this (two-membered) set forming operation

⁶ Chomsky (2008) argues that the operation Merge ‘comes free’ on the grounds that ‘Merge or some equivalent is unavoidable to capture the property of discrete infinity of language.’

Merge. Consider (6) to see how Merge is technically implemented, where only relevant structures are represented:

(6) a. who does John love?

b.



The single operation Merge can apply in two different ways: External Merge (EM) and Internal Merge (IM = Move).⁸ The former refers to the case where neither X or Y is part of the other, e.g., Merge of *loves* with (the lower) *who* to form $\{loves, who\}$ in (6b). The latter refers to the case where either X or Y is part of the other, e.g., Merge of the lower *who* to vP (see footnote 12 for the notation vP).

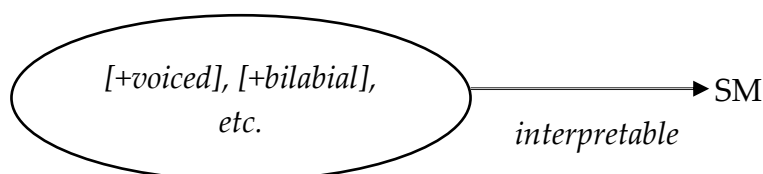
⁷ Phrasal and bar-level notations are only for expository purposes. See Section 2.4.5. for related discussions.

⁸ IM (=Move) was once considered a more complex operation than EM because it was assumed that the former consists of three subcomponents, (External-)Merge, AGREE and Pied-Piping (Chomsky 2000). In his later works, however, Chomsky rejects his own claim and argues instead that both kinds of Merge (i.e., EM and IM (=Move)) must be available for FL (Chomsky 2007, 2008). If this alternative view is on the right track, as I assume it is, the ubiquitous property of displacement (=IM) is not an 'imperfection' of language but rather, barring it would be a stipulation.

2.5.2 Feature Interpretability and Probe-Goal System

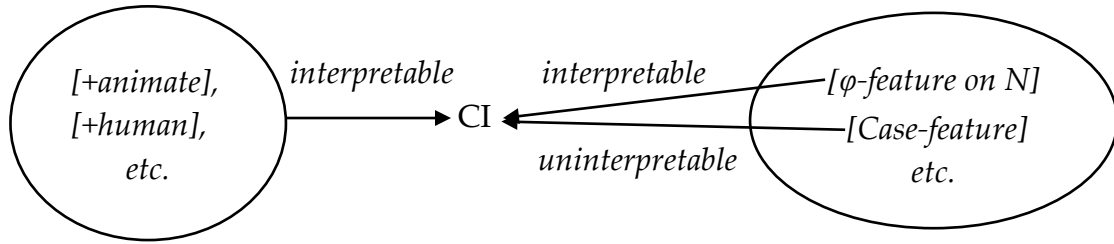
The MP takes a lexical item (LI) to be a collection of three different types of features: phonological, formal (or syntactic), and semantic features. All phonological features are argued to be ‘interpretable’ but only at the SM interface because they are essential to interpreting phonological properties of LIs. For the same reason, all semantic features are ‘interpretable’ but only at the CI interface. Formal features, however, come in two kinds: one with semantic content and the other without. Formal features with semantic content are ‘interpretable’ (only) at the CI interface, whereas those without are ‘uninterpretable’ at the CI-interface.^{9,10} The relations between these three features are illustrated in (7):

(7) Phonological Features:



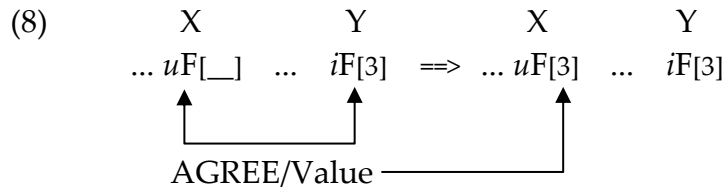
⁹ It is not clear, however, that all CI-uninterpretable formal features are SM-uninterpretable as well. Case feature of an NP, for example, does not contribute to semantic interpretation of the NP and it is therefore CI-uninterpretable. The same feature, however, seems to contribute to phonological interpretation of the NP; otherwise, the nominative ‘he’ [hi] will not be distinguished at the SM interface from its accusative counterpart ‘him’ [hm]. Although this unclarity is not represented in the diagrams in (6) (for expository purposes), it should be noted.

¹⁰ Following Chomsky (2007, 2008), we take mapping to SM to be an “ancillary process” and confine our discussion of feature-interpretability to the CI interface.

Semantic Features:**Formal Features:**

As discussed in Section 2.2., expressions generated by FL are handed over to the CI-interface (as well as to the SM interface) for relevant interpretation. If FL is indeed a perfect solution to interface conditions as the SMT states, however, FL-generated expressions must not contain any CI-uninterpretable features: if it does, the expression (or the LI with such an uninterpretable feature) will not be able to receive proper interpretation. As we saw, however, there are some formal features which are uninterpretable at the CI interface.

To tackle this conundrum between the existence of uninterpretable (formal) features and their uninterpretability at the CI interface, the MP hypothesizes that these uninterpretable features are 'valued' and subsequently deleted before reaching the CI interface. Consider (8) to see how this valuing and subsequent deletion of uninterpretable formal features is technically implemented:



Let us suppose that (CI-)uninterpretable features are ones with their feature value unspecified in the lexicon and that an LI, X, in (8) bears such a feature (indicated as

$\mu F[__]$).¹¹ This uninterpretable feature, called ‘probe’, searches into its c-command domain for the closest matching interpretable feature called ‘goal.’ If it locates such a goal (e.g., $iF[3]$ in (8)), the operation called ‘AGREE’ takes place between the probe and its goal. As a result of AGREE, the lexically unspecified feature value of the probe turns into the value of its goal (e.g., from $[__]$ to $[3]$ in (8)) and finally, the valued uninterpretable feature gets deleted.¹²

2.5.3 Transfer and Phase

The operation ‘Transfer’ is the technical device that hands the Syntactic Object (SO) constructed by FL to each of the interfaces for interpretation (Chomsky 2007, 2008). As discussed in Section 2.4.2., phonological features are interpretable only at the SM interface, while semantic and (CI-interpretable) formal features are interpretable only at the CI interface. Therefore, part of the work Transfer does is to separate phonological features from semantic/formal features, handing each over to its relevant interface. This job of separating phonological features from semantic/formal features is performed by an operation often called ‘Spell-Out’ to distinguish it from the other route of Transfer, i.e., mapping to the CI interface.

A question that arises is at which point of the derivation Transfer applies and how much of the structure is sent to the interfaces by application of Transfer. Chomsky (2007, 2008) claims that both timing of and the unit for Transfer are

¹¹ See Pesetsky & Torrego (2007) where the authors argue for independence of feature interpretability and valuation.

¹² Chomsky (2008) suggests that the deletion occurs as part of Transfer, which will be discussed in more detail in Section 2.5.3.

determined by what he calls a ‘phase’¹³, arguing further that these phases are CP and vP¹⁴, each of whose head (i.e., C and v) is called a ‘phase-head.’ Once a phase is completed, Chomsky goes on to argue, the complement of the phase-head called ‘domain’ is transferred to each of the interfaces, leaving behind the phase-head itself and what’s in its specifier position called the ‘edge’ for further computation:

- (9) a. John loves Mary.
 b. $[_{VP} \text{ John} \quad v \quad [_{VP} \text{ loves Mary}]]$
 ↓ ↓ └──────────┘
 edge *phase-head* Transferred

In (9), after the phase vP is completed, the domain of the phase-head v (i.e., VP) becomes the unit for Transfer and is subsequently handed over to the interfaces, the phase-head v itself and *John* in its edge remaining for further computation. Transferred SOs are assumed to be no longer accessible to subsequent stages of derivation, which is formulated as a condition called the Phase Impenetrability Condition (PIC, adapted from Chomsky 2001: 13):

(10) **Phase Impenetrability Condition (PIC)**

The domain of a phase head is not accessible to operations in FL; only the phase head and its edge are accessible to such operations.

¹³ Chomsky further claims that along with Transfer, all other operations in FL are driven only by phase heads.

¹⁴ Chomsky (2001) makes a distinction between (transitive) v*P and (passive/unaccusative) vP, calling the former a ‘strong’ phase and the latter a ‘weak’ phase. Since our discussion does not hinge on the distinction, I will use the notation vP for simplicity to refer to the strong phase.

2.5.4 Feature Inheritance

Subject-agreement features show up on C in many languages. West Flemish (11a-b from Haegeman 1992) and Katwijk Dutch (11c from Barbiers, *et al.* 2005) are such languages:

- (11) a. Kpeinzen *dan-k* (ik) morgen goan.
I-think that-I (I) tomorrow go
'I think that I'll go tomorrow.'
- b. Kpeinzen *da-j* (gie) morgen goat.
I-think that-you (you) tomorrow go
'I-think that you'll go tomorrow.'
- c. ... *datt-e* we/jullie/hullie gewoon lev-e.
that-PL we/youPL/they normal live-PL
'... that we/you/they live normally.'

Based on the empirical data as in (11) and other conceptual arguments¹⁵, Chomsky (2007, 2008) argues that ϕ -features, which were once proposed to be lexically inherent to T, originate in fact in C and are inherited by T in the course of derivation^{16,17,18}:

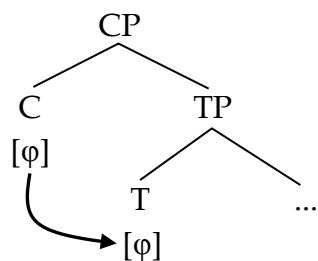
¹⁵ Chomsky (2007) adopts Richards's (2007) arguments that the necessity of feature inheritance can be deduced from timing between valuation and Transfer of uninterpretable features.

¹⁶ Chomsky further claims that not only ϕ -features but also the tense feature originates in C.

¹⁷ Chomsky extends feature-inheritance to the vP phase, arguing that ϕ -features of v are also inherited by its complement head V. In Chomsky (2013, (2014), he further extends feature-inheritance to other features of C, arguing that not just ϕ -features but all the features of C (e.g., Q-feature) are inherited by T.

¹⁸ One may wonder what happens to the ϕ -features (as well as other features) on C after they are inherited by T. Chomsky (2013, 2014) claims that the mechanism 'feature-inheritance' should be understood as copying, i.e., C keeps all its features (even) after inheritance. For different approaches, see Ouali (2008).

(12) Feature Inheritance



In addition to empirical data that show ϕ -features originate in C, Chomsky (2008) presents a conceptual argument from the CI-imposed requirement. According to Chomsky, CI requires that the (well-known) A/A' distinction of movement be structurally established. If ϕ -features, which are argued to be responsible for A-movement, are inherited by T, an A-position is created in Spec-T and Spec-C can be reserved for A'-movement.

Richards (2007) argues against Chomsky's (2008) conceptual argument just describe, by pointing out that the CI-imposed structural A/A' distinction can be made otherwise: he argues that since a head are allowed to have multiple specifier positions, the structural A/A' distinction can be made between the first and the second specifier position of C. He then presents an alternative (conceptual) motivation for feature-inheritance based on what he calls 'Value-Transfer Simultaneity' and the Phase Impenetrability Condition (PIC).

As discussed in Section 2.5.2, uninterpretable features are valued through the operation AGREE with matching interpretable features, subsequently deleted and transferred to the interfaces by the operation Transfer. Notice that once valued, uninterpretable features are indistinguishable from interpretable features (see (8) above). Therefore, if feature valuation (i.e., AGREE) takes place 'before' Transfer, Richards argues, uninterpretable features will reach the CI-interface and the

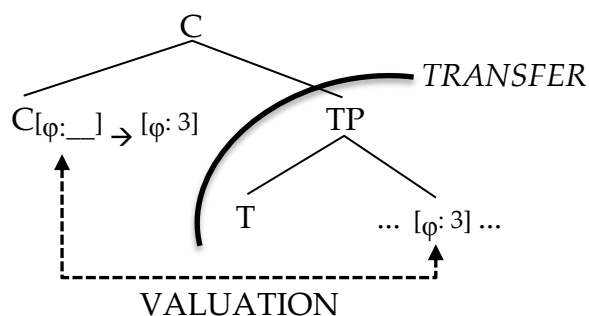
derivation will crash.¹⁹ He continues to argue that the situation does not improve even if valuation takes place ‘after’ Transfer because “unvalued features are cannot be interpreted.” Based on this logic, Richards argues that valuation must occur ‘simultaneously’ with Transfer (his Premise 1).

Let us now consider the PIC in (10), repeated here as (13):

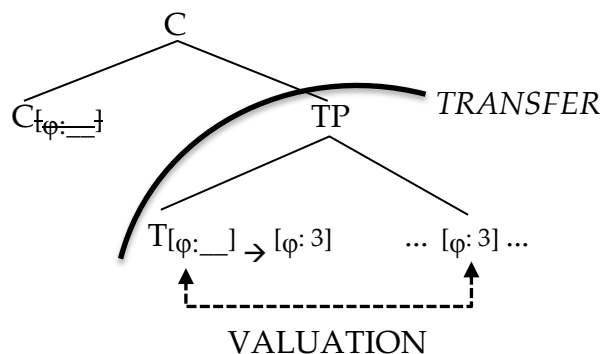
(13) **Phase Impenetrability Condition (PIC)**

The domain of a phase head is not accessible to operations in FL; only the phase head and its edge are accessible to such operations.

(14) a. **Without Feature-Inheritance**



b. **With Feature-Inheritance**



¹⁹ Given the assumption that once valued, uninterpretable features are ‘indistinguishable’ from interpretable features, it is not clear how the CI-interface can recognize ‘valued’ uninterpretable features as uninterpretable features.

According to the PIC, C must remain available to operations in the next higher phase, while TP is transferred to the interfaces. In other words, the phase head C and its complement TP belong to different phases for the purposes of Transfer (Richards' Premise 2). Recall that feature valuation must occur simultaneously with Transfer; otherwise the derivation will crash at the interfaces. If this assumption is on track, the structure in (14a), where no feature-inheritance is carried out, will inevitably crash because a delay occurs between valuation of C's ϕ -features and its Transfer. If we assume that ϕ -features on C are inherited by T, however, feature valuation (of ϕ -features) will occur at T. Consequently valuation and Transfer can take place simultaneously and the derivation will not crash.²⁰ Richards therefore deduces the necessity of feature-inheritance from his two basic premises (Premise 1 and Premise 2 above).

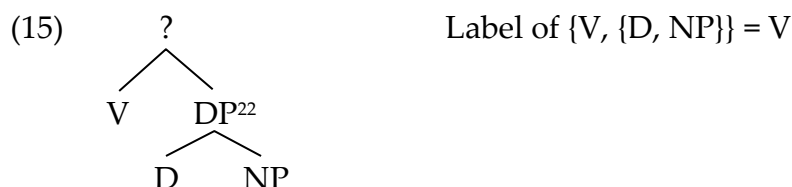
2.5.5 Labeling Theory in Chomsky (2013, 1014)

As noted in Section 2.4.1., the operation Merge combines two SOs, X and Y, to form a set {X, Y} from them. In other words, the operation Merge creates a new SO which is different from its members. Take, for example, Merge of V 'read' with DP 'the book.' The resultant SO from this Merge is equivalent to neither V nor DP, but it is a new object (commonly represented as VP).

Chomsky (2013) claims that information about the identity of an SO is necessary in order for the SO to be interpreted as such at the interfaces. Put differently, each SO must contain information about 'what kind of (syntactic) object it is'. If we adopt this assumption, it follows that any newly-created SO by

²⁰ It must be assumed, however, that ϕ -features on C are deleted after they are inherited by T.

Merge must also contain such necessary information that Chomsky calls a ‘label’.²¹ He goes on to argue that the label of an SO is determined by what he calls the operation ‘Labeling Algorithm (LA)’. Consider (15) to see how LA works:



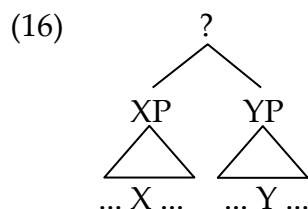
The operation LA searches for the closest head within the given SO, where ‘closest’ means ‘least embedded’ in the given structure. Put differently, LA is an operation based on ‘Minimal Search’ and therefore it can be justified from third factor considerations (i.e., computational efficiency).

If LA locates such a head H, it will select H as the label of the given structure. In (15), for example, the closest (i.e., the least embedded) head is V (because the other candidate heads, D or N, are more deeply embedded than V and hence ‘more’ search is required). Therefore, LA selects V as the label of {V, {D, NP}}.

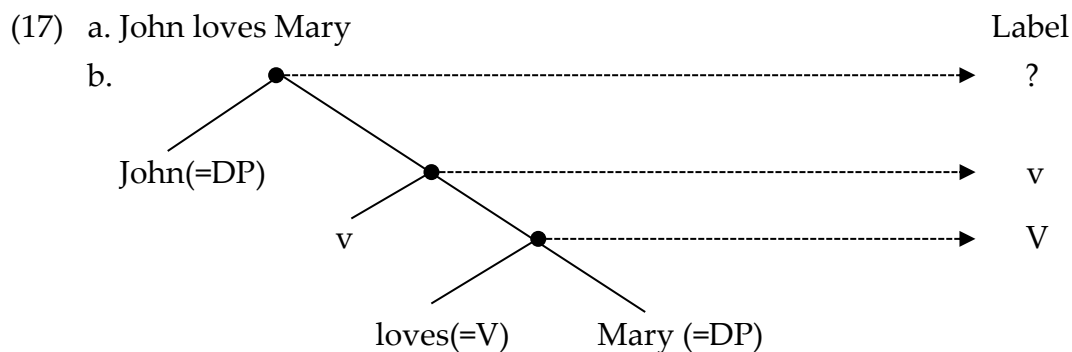
Not all SOs generated by FL can be as unambiguously labelled as one in (15). Consider (16):

²¹ If we adopt Chomsky’s (2013, 2014) claim that the label of an SO is determined at the phase level, a newly-created SO need not have a label at the time of Merge. It must have one, however, before it is transferred to the CI-interface; otherwise, it cannot be interpreted at the CI-interface.

²² It should be noted that in Chomsky’s (2013, 2014) system, the label of an SO is not ‘represented or indicated’ in the structure by independent notations such as DP and NP. Rather, it is just ‘detected and determined’ by LA. The projections, DP and NP, in (15) are therefore for expository purposes.



As discussed, LA selects the least embedded head as the label of the given structure. In (16), however, there are two such heads, namely, X and Y because they are equally close to the eye of LA. Therefore, LA cannot determine which of the two heads is to be the label of {XP, YP}. This type of ambiguous structures is commonly found in transitive structures. Consider (17):

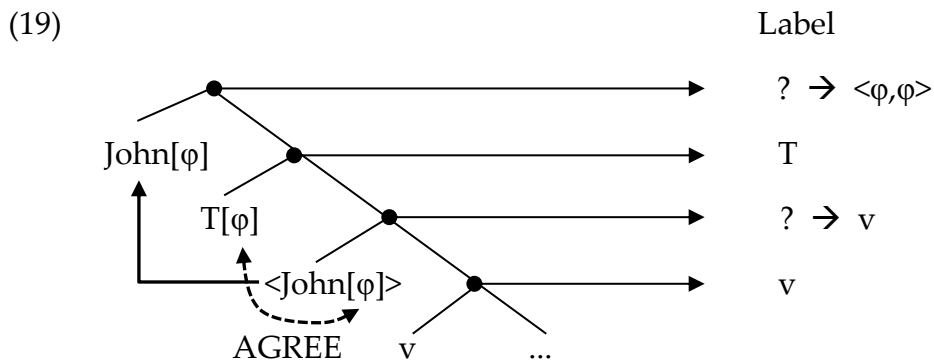


(17b) has three SOs generated by Merge, i.e., {loves, Mary}, {v, {loves, Mary}}, and {John, {v, {loves, Mary}}}. Among these, the first two SOs can be unambiguously labeled because each has only one head that is closest to labeling. Therefore, they are labeled as V and v, respectively. The last SO (i.e., {John, {v, {loves, Mary}}}), however, is problematic for LA because it contains two possible candidates for labeling, namely, D and v. Consequently, LA cannot choose which of the two heads is to be the label.

Assuming that a copy of a moved element is not visible to LA,²³ Chomsky (2013) argues that offending SOs such as one in (16) and (17b) can still be labelled if one of the following conditions is met:

- (18) A. Modification of SO so that there is only one visible head.
 B. Sharing of the most prominent feature between X and Y.

Suppose that in the course of derivation, John in (17b) raises to Spec-T, leaving its copy in Spec-v:



There are two offending SOs for labeling in (19); one is the outcome of second Merge, i.e., Merge of John to Spec-v, and the other is the outcome of fourth Merge, i.e., Merge of the lower John to Spec-T. Although both of these offending SOs have the form of {XP, YP} as (16), they can still be labelable.

Consider first the outcome of second Merge. Since John in Spec-v is the copy of the higher John, it is invisible to LA. In other words, the structure is modified so that only one head, which is v, is visible to LA. Therefore, the label of the structure

²³ Chomsky (2013: 44) claims that a copy of a moved element is invisible to LA because it is “part of a discontinuous element”; only the head of a chain is visible to LA.

can be determined as v according to (18A). Consider now the offending outcome of fourth Merge. Although there are two heads, D and T , which are equally close to LA , both heads share ϕ -features.²⁴ Therefore, according to (18B), the structure can now be labeled as $\langle \phi, \phi \rangle$ ²⁵.

²⁴ Chomsky (2013: 45) argues that “mere matching of most prominent features does not suffice” but there must be an AGREE relation established between those features for (the ordered pair of) them to serve as a label.

²⁵ Chomsky (2014) claims that if labeling is instantiated by a shared feature, the resultant label is of the form of an ordered pair of the shared feature.

Chapter 3

Topic, Focus and the Minimalist Program

3.1. Introduction

This chapter examines the two notions, Topic and Focus, and their subtypes, presenting definitions of each of these terms that we adopt throughout our discussion. The chapter also presents a brief review of two previous (influential) analyses of Topic and Focus within the framework of the Minimalist Program: one is Rizzi (1997) and the other is Miyagawa (2010).

The organization of the chapter is as follows: Section 3.2 discusses, clarifies and defines the notions, Topic and Focus. The notion Topic will be divided into two different subtypes, namely, 'Plain Topic' and 'Contrastive Topic'. The notion Focus will also be divided into two different subtypes, i.e., 'Information Focus' and 'Contrastive Focus'. Section 3.3 presents a brief review of the two influential analyses of Topic/Focus within the framework of the Minimalist Program: Rizzi (1997), where two functional projections in the CP-domain, i.e., 'Topic Phrase' and 'Focus Phrase', are proposed to be dedicated to hosting NPs with a topic or focus feature, respectively, and Miyagawa (2010), where no designated functional projections such as Topic Phrase and Focus Phrase are assumed but rather, the uninterpretable 'focus feature', [-foc], on C and its inheritance by a lower head (e.g., T) plays a crucial role in determining the structural distribution of topicalized and focused NPs.

3.2 Topic, Focus and their Subtypes

The two notions, Topic and Focus, have been central research topics in syntactic theories of grammar such as HPSG, LFG and RRG, semantics and pragmatics since the notions were first introduced by the Prague School of Functional Linguistics in the late 1920's (Mathesius, 1929). Despite the intensive and extensive discussion for almost a century, however, definitions of these notions still vary depending on the field and adopted theoretical framework. As a result, their exact, explicit definitions still remain controversial and elusive up to present day.

The theoretical issues raised by linguists of various schools from many different viewpoints, while interesting, are outside the scope of this dissertation. Instead, we will focus mainly on clarifying the definition of these terms we will adopt and employ. For those who are interested in a thorough historical review of the development of various definitions and other related notions/issues, see Vallduví (1990); Lambrecht (1994); Erteschik-Shir (2007), among many others.

3.2.1 Topic

I will clarify the notion 'Topic' that our discussion focuses on by delimiting it in various ways. First, I distinguish 'discourse Topic' from 'sentence Topic' and restrict our use of Topic to the latter. To understand the difference between these two notions of Topic, let us consider the following two discourses where (1) consists of a single sentence and (2) of a sequence of sentences.¹

¹ The two discourses are modelled on those in van Dijk (1977).

- (1) Minji is a graduate student.
- (2) Minji woke up at 7 o'clock in the morning. Today is her first day as a graduate student and her first class starts at 9 am. She hurriedly took a shower and had some breakfast. The bus would leave at 8:15 from her apartment and she did not want to come late the first day. She was too nervous to read her favorite novel on the bus. At around 8:40 the bus arrived right across from her department. The department where she will spend the next 5 years or so of her life is in the tallest building on campus (...)

Under a normal intonation, sentence (1) can intuitively be said to be about *Minji*.² In other words, *Minji* is the Topic of the sentence in (1), the rest being the comment expressing what is said about *Minji*.³ In the same intuitive way, the Topic of (2) can also be understood as *Minji* since there can be little doubt that (2) is a narrative about *Minji*. But the crucial distinction is that the Topic of (2) (i.e., discourse Topic) can be more abstract and hence need not be a part of the discourse, i.e., something beyond what corresponds to a specific sentence or a sentence constituent. For example, the (discourse) Topic of (2) can be '*Minji's first day as a graduate student*', '*what Minji experienced on her first day as a graduate student*' or '*how she felt on her first day as a graduate student*'. Of course, the (discourse) Topic of (1) can also be more abstract and hence perceived as being, for example, '*Minji's academic status*'. In fact, this overlap between these two types of Topic leads to additional specification of the notion 'sentence Topic.' That is, our 'sentence Topic' refers not only to a Topic on a 'sentence-level' (as compared to discourse-level), but also to a 'linguistic unit' or a 'syntactic category (or constituent)' of a given sentence. More specifically, I

² This might be the case even when (1) is uttered in isolation without any previous context. Therefore, a question like '*Who's Minji?*' would sound more natural as a follow-up question than a question like '*Who else is a graduate student?*'

³ Traditionally speaking, *Minji* in (1) is the 'theme' and the rest is the 'rheme' (Firbas, 1964; Halliday, 1967).

will restrict our discussion of ‘sentence Topic’ to refer to NP (or ‘argument’) Topics only, as discussed in Lambrecht (1994). This I do, not because other constituents cannot serve as Topics but because their formal analysis is far more complicated and hence beyond the scope of this dissertation.

Even if we distinguish discourse Topic from sentence Topic and define our sentence Topic to refer to NP (or argument) Topics only, it is not always an easy task to unambiguously identify such a Topic NP in a sentence. This is especially so in languages like English where topic interpretation of an NP relies heavily on contextual cues or phonological characteristics (e.g., prosodic prominence) of the NP, rather than its syntactic/structural position or morphological marker.⁴ Consider (3):

(3) Minji went to the movies with Mike.

If the sentence (3) is uttered as a reply to the request, ‘*Tell me about Minji. What did Minji do yesterday?*’, the subject NP *Minji* is properly understood as the Topic of the sentence (i.e., *Minji* is what the sentence is about). Accordingly, the topic-hood of the subject *Minji* will also be phonologically encoded by low pitch prominence on it.

Let us now consider a different context in which (3) is uttered as a reply to a different request like ‘*Who went to the movies with Mike?*’⁵ Unlike in the previous

⁴ English as well can mark a Topic NP by way of special phrases such as ‘Speaking of X, ...’, or by means of left dislocation (e.g., Your research proposal, the committee members found unfeasible).

⁵ ‘Minji’ or ‘Minji did’ would be a more natural answer to the question ‘who went to the movies with Mike?’ Nonetheless, the answer ‘Minji went to the movies with Mike’ does not make itself an infelicitous answer to the question.

context, the subject *Minji* in this case is understood, not as the Topic of the sentence as we define it, but as a focused element⁶. Consequently, the subject *Minji* will bear most prominent stress. The point here is that in languages like English, we seem to have to know the context and/or the phonological property of an NP in order to unambiguously determine whether the NP is the Topic (or the Focus) of a given sentence.⁷

In order to avoid the indeterminacy of topichood of an NP in a sentence when the sentence is presented in isolation, I will follow Neeleman *et al.* (2009) in assuming that when we say in English examples that an NP, X, is the Topic of the sentence, X is understood in the context of '*Tell me about X*'⁸ as exemplified in (4):

- (4) a. (Context: *Tell me about Mike.*)
 b. Mike⁹ is a graduate student. [Mike = Topic]

⁶ This corresponds to what É. Kiss (1998) calls the 'information Focus'. Later in section 3.2.3., I label it I-Focus to distinguish it from 'C(ontrastive)-Focus'.

⁷ As Reinhart (1981) points out, there seems to be a strong preference to interpret the sentence-initial NP as the Topic of the sentence (even when without a given context). Consider:

- (i) Felix goes out with Rosa.
 (ii) Rosa goes out with Felix.

(i) and (ii) share the same propositional meaning. Nonetheless, (i), but not (ii), seems to be more appropriate in the context where we intend to state something about *Felix*.

⁸ Citing Reinhart (1981), Neeleman *et al.* (2009) argue that a request such as '*Tell me about X*' forces X to be interpreted as an 'aboutness Topic' in the reply. Other topic-forcing expressions include '*What about X?*'

⁹ In English, using the pronoun '*he*' instead of reiterating '*John*' as the subject would sound more natural. Even so, however, the use of '*John*' does not make the statement in (4b) infelicitous to the request in (4a). In Korean, using '*John*' instead of the pronoun '*he*' sounds more natural in this case.

In sum, throughout our discussion, we will take the term ‘Topic’ to refer to an NP which is interpreted as what a given sentence is about.

3.2.2 Focus

Just like Topic, the term ‘Focus’ has also been defined in various ways by different scholars. For our purposes, however, I will restrict our discussion of Focus to an NP (or argument) Focus and adopt the widely held view of it as the informative part of a sentence normally marked by prosodic prominence (i.e., high pitch accent) (Jackendoff 1972; Vallduvi & Engdahl 1996; Gundel 1998). As such, Focus (of a sentence) can be identified as the NP that answers the *wh*-part of a preceding *wh*-question (e.g., *John* in (5A) and *flowers* in (6A)):

- (5) Q: who brought the flowers?
A: John (brought them). [John = Focus]
- (6) Q: what did John bring (to the party)?
A: (He brought) the flowers. [Flowers = Focus]

As with Topic, certain indeterminacy is also observed in the interpretation of a focused NP. Consider:

- (7) Q: *who proposed to Minji?*
A: [John]_{FOCUS} (proposed to Minji).
- (8) Q: *what happened?*
A: [John proposed to Minji]_{FOCUS}

The Focus NP of (7A) is *John* as it provides the information about the *wh*-part of the preceding question. In (8A), however, focus interpretation does not seem to

particularly reside in either *John* or *Minji* but rather, the entire sentence is interpreted as Focus. In the literature, cases like (7A) where the focus interpretation is restricted to a single NP are often referred to as ‘narrow focus’, ‘argument focus’ or ‘information focus’ (Ladd 1980, 2008; Lambrecht 1994, 2001; É. Kiss 1998), while cases like (8A) where the focus domain extends over the whole proposition is known as ‘sentence-focus’, ‘all-focus’ or ‘topic-less neutral description’ (Lambrecht 1994; Kuno 1973). Following E. Kiss (1998), I will refer to the former type of Focus NP (e.g., [John]_{Focus} in (7A)) as ‘Information Focus (I-Focus)’ and an NP that is part of ‘sentence-focus’ (e.g., *John* or *Minji* in (8A)) as an argument that is associated with neither a topic nor a focus interpretation.

3.2.3. Contrast

The final notion we discuss is that of Contrast. Consider:

- (9) (Context: *What did Minji buy at the mall?*)
 A: Minji bought some candles. [Minji = Topic, candles = Focus]
- (10) (Context: *Minji, John and Mike together went to a mall. They each purchased what they needed. Philip, who didn’t join, wonders what each of the three bought. So he asks Mike the following question*)
 Philip: What did Minji and John buy at the mall?
 Mike: Minji bought some candles.
(Implication: and/but John bought two pairs of socks *or* but I don’t know what John bought).
 [Minji = Contrastive Topic, candles = Contrastive Focus]

Given the context in (9), the subject *Minji* is one and only entity that is talked about and no alternative Topics other than *Minji* are implied. In Mike’s answer in (10),

however, *Minji* is not only the Topic of the sentence but it also conveys something more; it implies an entity other than *Minji*. In other words, *Minji* in this case is not just the Topic but is also contrasted with the other possible Topic, namely, *John*. According to Jackendoff (1972: 261), this contrastive interpretation of the Topic *Minji* in (10) is prosodically realized with a complex ‘fall-rise’ accent on *Minji* that he calls the “B pitch accent.”¹⁰ To distinguish between these two types of Topic, I will apply the term ‘Contrastive Topic (C-Topic)’ to refer to the NP Topics whose interpretation implies some other entity or entities. I will save the term ‘Plain Topic (P-Topic)’ for the NP Topics without such contrastive implications.

Notice that the interpretive difference between C-Topic and P-Topic is also observed between the interpretation of the Focus NP ‘*candles*’ in (9) and (10). Unlike ‘*candles*’ in (9), the Focus NP in (10) bears the implication that e.g., somebody else bought something else. In other words, the Focus NP ‘*candles*’ in (10) is ‘contrasted’ with some other items which somebody else might have bought.¹¹ There is no such contrastive interpretation implied in the Focus NP ‘*candles*’ in (9); instead, it just provides the information what *Minji* purchased and hence it is an example of Information Focus (I-Focus) discussed in section 3.2.2. I will use the term ‘Contrastive Focus (C-Focus)’ if a focused NP is interpreted contrastively (e.g., ‘*candles*’ in (10)) to distinguish it from I-Focus).

¹⁰ Under Pierrehumbert’s (1980, 1990) system of intonational description, this distinctive fall-rise contour associated with Contrastive Topics is indicated by L+H* LH%, where L and H stand for low and high tones, respectively, and the symbols * and % respectively stand for pitch accent and boundary tone. For related discussions, see also Büring (to appear).

¹¹ As with P-Topic and C-Topic, the difference between I-Focus and C-Focus is also prosodically realized. I-Focus is argued to be marked with what Jackendoff (1972) calls the ‘fall of the A accent’ or what Pierrehumbert (1980, 1990) calls an ‘H*’ pitch accent, while C-Focus receives what Jackendoff calls the ‘fall-rise B accent’ or Pierrehumbert calls an ‘L+H*’ pitch accent.

In sum, both Topic and Focus can be interpreted contrastively. Throughout I will refer to the former as C-Topics and the latter as C-Foci.

3.2.4. Summary

We discussed the two notions, Topic and Focus, and delimited our discussion of these notions to NP expressions. We further divided the two notions, Topic and Focus, into their subtypes in relation to the notion of Contrast; the notion Topic is divided into P-Topic and C-Topic depending on whether the relevant Topic NP bears a contrastive implication. We also divided the notion Focus into two different subcategories, i.e., I-Focus which provides the relevant information about the *wh*-part of a preceding *wh*-question, and C-Focus which carries a contrastive implication just like C-Topic. Finally, we assumed that an NP is not associated with a topic or focus interpretation if it occurs as part of the so-called ‘sentence-focus’ construction. Below lists all the notions with a relevant example:

(11) a. **P-Topic:**

(Context: Tell me about Minji.)

A: Minji is a graduate student.

[Minji = P-Topic]

b. **I-Focus:**

(Context: *Who proposed to Mike?*)

A: Minji (proposed to Mike).

[Minji = I-Focus]

c. **C-Topic/C-Focus:**

(Context: *What did they buy (at the mall)?*)

A. Minji bought some candles (and/but John bought some books).

[Minji, John = C-Topic; candles, books = C-Focus]

d. **Neither Topic nor Focus** = Part of Sentence-Focus

= entire sentence between []_{FOCUS}

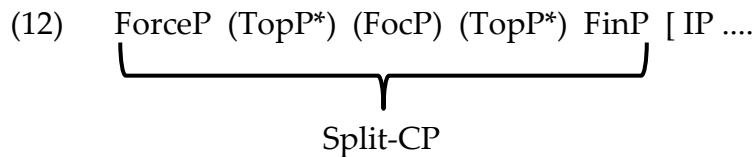
(Context: *What happened?* or *What's new?*)

A: [Mike proposed to Minji]_{FOCUS}

3.3 Topic and Focus within the Minimalist Program

3.3.1. Rizzi (1997): Projection-based Approach

Exploring the distributional phenomena of topics and focused constituents in Italian and other Romance languages, Rizzi (1997) proposes to break up what he calls the 'left periphery' of the clause (i.e., the CP projection) into a sequence of functional projections as illustrated in (12), where the asterisk * indicates possible multiple occurrences of the given projection and the parentheses represent the optionality of the enclosed element:



In his system, the conventional C-domain consists of at least two additional independent functional projections, ForceP and FiniteP (FinP).¹² ForceP is associated with the 'clause Type', expressing whether a clause is a question, a declarative, etc. FinP contains a 'tense specification' (i.e., finite vs. non-finite) which

¹² Rizzi (1997: 285) argues that "the force-finiteness system expresses the selectional relations between a C system and the immediately higher and lower structural systems."

matches the one expressed on the lower I system.¹³ He further argues that when needed, additional projections, Topic projection (TopP) or Focus projection (FocP),¹⁴ can be optionally sandwiched in between ForceP and FinP. In the course of the derivation, each specifier position of TopP and FocP is filled by a constituent bearing the relevant feature (i.e., topic or focus feature) to satisfy what he calls ‘Topic and Focus Criteria’.¹⁵ Put differently, TopP and FocP in Rizzi’s system are the functional projections (in the C-domain) dedicated to hosting a topicalized and a focused constituent, respectively. When TopP and FocP are both activated in a clause, TopP can be generated either immediately above or below FocP as illustrated in (13). Examples are based on Rizzi (1997: 296-296, (37)):

¹³ Rizzi (1997: 283-284) argues that ‘the temporal properties encoded by Fin are more rudimentary than tense and other inflectional specifications on the verbal system.’

¹⁴ It is not clear, however, how the notions ‘Topic’ and ‘Focus’ are defined in his system.

¹⁵ Rizzi’s (1997) ‘Criterial Condition’ states that a constituent with topic or focus features ‘must end up in a Spec/head configuration with Top or Foc, respectively.’ In other words, a constituent that bears e.g., a topic feature can be properly interpreted as a topicalized element only if it occurs in a Spec-head relation with the functional head Top. Rizzi assumes this ‘Criterial Condition’ as he adopts the principle of ‘Last Resort’ proposed in Chomsky (1995):

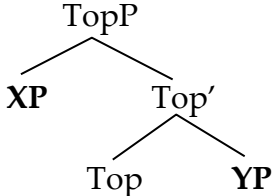
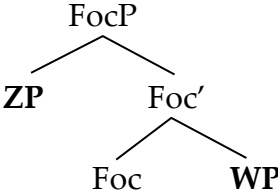
Last Resort (Chomsky 1995: 28)

Computational operations [e.g., Move] must be driven by some condition on representations, as a “last resort” to overcome a failure to meet such a condition.

It should be noted, however, that Rizzi’s criterial satisfaction does not involve checking/deletion of a feature as it does in Chomsky’s (1995) ‘feature-checking’ because as Rizzi (1997: 281) argues, features such as topic and focus “determine the interpretation of the category bearing them.”

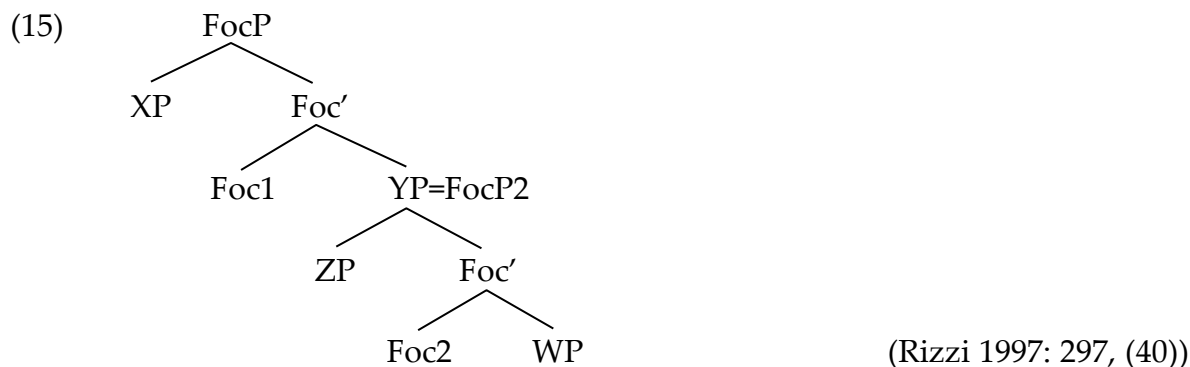
- (13) a. Credo che a Gianni, QUESTO, domani, gli dovremmo dire
 believe-1SG that to Gianni, THIS, tomorrow, to.him we.should say
Force Top Foc Top IP
 'I believe that to Gianni, THIS, tomorrow we should say.'
- b. Credo che domani, a Gianni, QUESTO gli dovremmo dire
Force Top Top Foc IP
 'I believe that tomorrow, to Gianni, THIS, we should say.'
- c. Credo che QUESTO, a Gianni, domani, gli dovremmo dire
Force Foc Top Top IP
 'I believe that THIS, to Gianni, tomorrow, we should say.'

(13b,c) show that a clause can contain multiple TopPs either above or below FocP. In fact, Rizzi argues that while only one FocP is allowed in a clause, indefinite number of TopPs are possible in either positions (i.e., immediately above or below FocP) as long as they are consistent with the number of topicalized constituents of the clause. This is, he goes on to argue, because of the different interpretive properties of Topic and Focus:

- (14) a. 
XP = topic
YP = comment
- b. 
ZP = focus
WP = presupposition
 (Rizzi 1997: 286-287)

He assumes that what occupies the specifier position of Top (i.e., XP in (14a)) is interpreted as the Topic (of a sentence), while its complement position (i.e., YP in

(14a)) is interpreted as the Comment. For FocP, its specifier position (i.e., ZP in (14b)) is interpreted as the Focus (of a sentence) and its complement position (i.e., WP in (14b)) is interpreted as the presupposition. Consider now (15) to see what happens when a clause has more than one FocP:



According to Rizzi's assumption, XP in (15) will be interpreted as the Focus, YP being the presupposition. Notice, however, that the presupposition YP contains yet another Focus, ZP. This state of affair leads to inconsistency with respect to interpretation because YP is the presupposition of the higher focal head Foc1, and as such YP can only specify given information. Therefore, "recursion of FocP is banned by the interpretive clash that would arise" (Rizzi 1997: 297). There is no such interpretive problem, Rizzi argues, in the case of recursion of Top because nothing excludes that a comment may be articulated in turn as a topic-comment structure.

Rizzi's (1997) split-CP model has been so fruitful that it has led to a series of research on different portions of the clause in many languages.¹⁶ This line of

¹⁶ See Cinque (1999) for decomposition of the conventional TP-domain into T, Mood and Asp(ect). For the DP and PP domain, see Cinque (2002) and Svenonius (2010), respectively.

research, which seeks to draw a map, as detailed as possible, of syntactic structure, has later become collectively known as ‘cartography’ research and its fundamental working assumption is that ‘each morphosyntactic feature corresponds to an independent syntactic head with a specific slot in the functional hierarchy (Cinque and Rizzi 2010).

3.3.2 Miyagawa (2010): Feature-based Approach

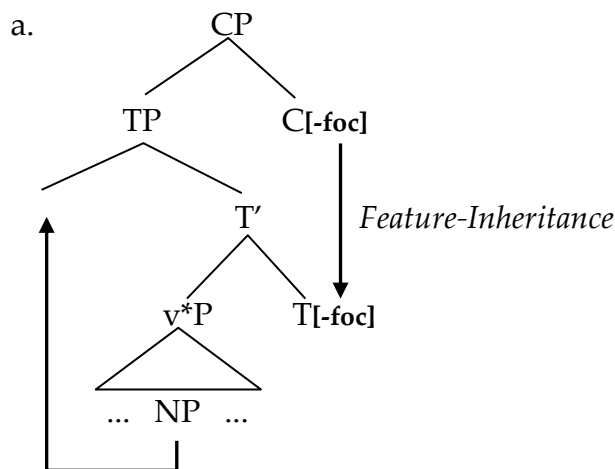
Contrary to Rizzi’s (1997) system where semantic interpretations such as Topic and Focus are syntactically encoded in distinct and dedicated functional projections in the CP-domain (i.e., TopP, FocP), Miyagawa (2010) does not assume such dedicated projections for Topic and Focus. Instead, he hypothesizes that Topic and Focus are ‘features’ that the head C can bear in what he calls ‘agreementless’ languages such as Japanese and Korean^{17,18} and these features are ‘computationally equivalent’ to ϕ -features of C in agreement languages in that they trigger and participate in syntactic operations such as movement and feature-inheritance. He further assumes that the two features, [topic] and [focus], start out as one default value [-foc] on C and during the course of the derivation this [-foc] feature is inherited by a lower head (e.g., T). Consider the following series of derivations to

¹⁷ Miyagawa (2010) distinguishes between ‘agreement’ languages such as English and ‘agreement-less’ languages such as Japanese based on whether ϕ -features (in agreement languages) or topic/focus features (in agreementless languages) are responsible for triggering movement. Though confusing, agreementless languages do exhibit ϕ -features as he notes. For agreement in Japanese, see Inoue (2006) and Ueda (2006). For agreement in Korean, see Pak 2006.

¹⁸ Miyagawa defines the notion ‘Topic’ in terms of ‘Sentence Topic’ (as compared to ‘Discourse Topic’), i.e., what the sentence is about. It is not clear, however, how he defines the notion ‘Focus’, although he briefly discusses ‘identification focus’ (Miyagawa 2010: 13-14).

further examine how the [-foc] feature of C in Miyagawa's system interacts with NPs to structure a sentence. He first proposes the following structural derivation for a sentence with just one topic NP.

(16) **One-topic Sentence** (based on Miyagawa 2010: 87, (67))



- b. [_{TP} piza-o [_{v*P} Taroo-ga <piza-o> tabeta]]
 pizza-Acc T.-Nom ate
 ‘Pizza, Taro ate.’ [pizza = Topic]

He assumes that unlike ϕ -features, the [-foc] feature on C can probe its goal at C¹⁹. If it finds such a goal (i.e., an NP with a [+foc] feature²⁰), it enters into an AGREE²¹ relation with the goal; if it does not, as Miyagawa assumes, it is inherited by T as unvalued. Since the sentence in (16b) does not contain an NP with a [+foc] feature,

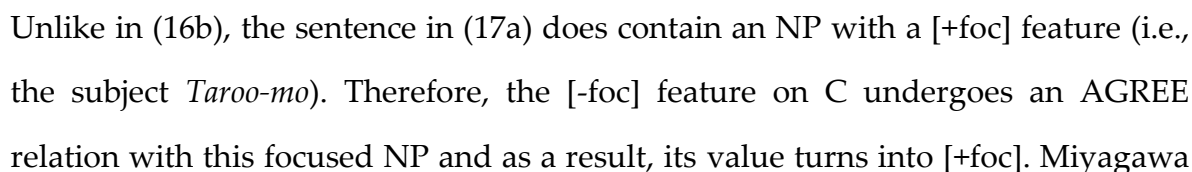
¹⁹ Miyagawa (2010: 22-23) claims that ϕ -features are incapable of identifying a goal by themselves until they are inherited by a lower head with an ‘activation’ mechanism. He further claims that the [-foc] feature does not require such activation and therefore it can probe its goal at C and it enters into an AGREE relation if it locates a [+foc] NP.

²⁰ Miyagawa (2010) assumes that a focused NP brings a [+foc] feature with it from the lexicon or it can be assigned a [+foc] feature at Numeration.

²¹ For the operation AGREE, see Section 2.5.2.

(17) **One-focus Sentence** (based on Miyagawa 2010: 88, (68))

a. [_{TP} TAROO-mo [_{v*P} <TAROO-mo>[+**foc**] hon-o katta]]
 T.-also book-Acc bought
 ‘Taro also bought a book.’ [Taro = Focus]

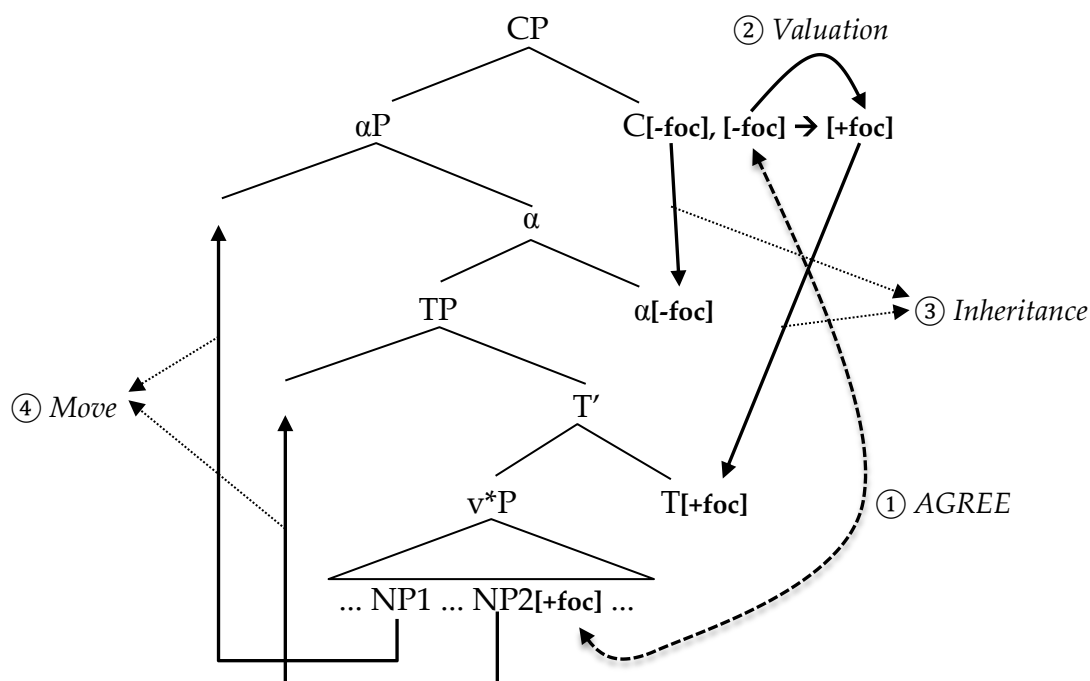


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further claims that the valued [+foc] feature on C is (still) inherited by T, which in turn attracts the focused subject *TAROO-mo* to its Spec position.

Finally, let us consider the following derivation Miyagawa proposes for a sentence that contains one topic and one focused NP.²³

(18) **Sentence with one-topic and one-focus** (based on Miyagawa 2010: 89, (69))



Unlike in (17), C in (18) bears two [-foc] features. Miyagawa assumes that when a clause has two NPs each of which is associated with Topic or Focus interpretation, an additional projection that he calls αP²⁴ occurs in between CP and TP. In the course of the derivation, one of the [-foc] features on C is inherited by this α, the

²³ Unfortunately, Miyagawa (2010) does not provide an example for the structure illustrated in (18). I will present an example from Korean in Section 3.3.3 below.

²⁴ He names it αP because the projection can host either a Topic or a Focus NP. If the clause contains only one Topic or Focus NP, αP does not occur.

other being inherited by T. Let us assume that the unvalued [-foc] feature on C is inherited by α in (18) from where it picks out NP1 and attracts it to its specifier position.²⁵ The other [-foc] feature on C, which locates its goal NP2[+foc] and subsequently turns into [+foc], is inherited by T from where it attracts NP2[+foc] to the specifier position T.

3.3.3 Some Problems with Rizzi's (1997) and Miyagawa's (2010) Model

Both Rizzi's (1997) and Miyagawa's (2010) analysis faces some conceptual and empirical issues, although the conceptual issue we discuss here is (much) weaker compared to the empirical issues.

First, the conceptual issue: As discussed, both Rizzi's (1997) and Miyagawa's (2010) analysis of Topic and Focus use the notions Topic and Focus as an independent syntactic projection and/or a syntactic feature operating in the syntax. In other words, both analyses introduce 'additional' projections/features to account for the phenomena at hand. Although introducing such additional theoretical postulates itself should not be a problem for an analysis as long as it can account for the phenomena at hand in a principled way, an analysis that does not appeal to such additional devices, which this dissertation aims for, would be a more principled account, conceptually at least, if we consider Occam's Razor.²⁶

Second, two empirical issues, one of which concerns both Rizzi's and Miyagawa's analysis and the other concerns Miyagawa's only. First, neither Rizzi nor Miyagawa discusses derivations in the v*P-domain; instead, they focus on the

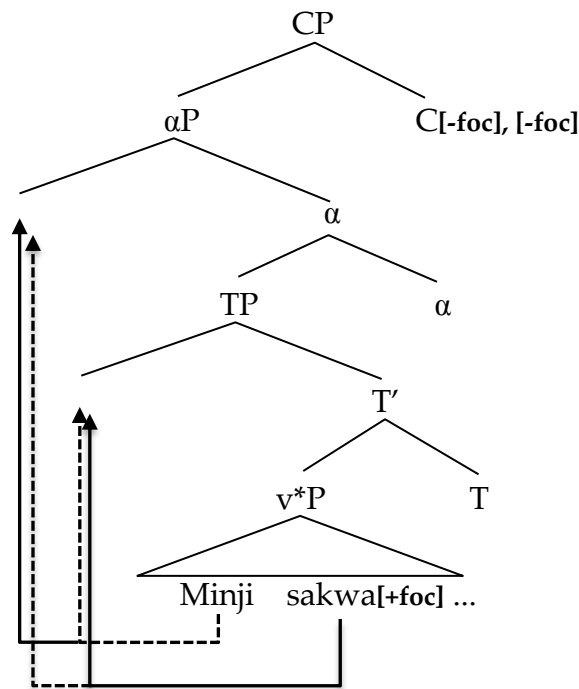
²⁵ If α inherits the valued [+foc] feature from C, only the relative order (or structural hierarchy) between NP1 and NP2 is altered.

²⁶ Occam's Razor states that among competing hypotheses that predict equally well, the simplest hypothesis with fewest assumptions should be favored as the most plausible.

derivations in the CP-domain only. However, given the parallelism between the CP- and the vP-domain where the object must go through OUTER-SPEC-v* to finally land in the CP-domain (Chomsky 2007, 2008), it is not clear in both Rizzi's and Miyagawa's analysis 1) what motivates the movement of the object to OUTER-SPEC-v* (before the object reaches the CP-domain) and 2) why the movement is not associated with Topic/Focus. The second empirical issue I would like to address concerns Miyagawa's analysis of the sentences with one Topic NP and one Focus NP:

- (19) a. Minji-nun sakwa-lul cohahanta
 M.-Top apple-Acc likes
 'Speaking of Minji, it is apples that she likes.'
 [Minji = Topic, sakwa = Focus]

b. Miyagawa's Analysis



The sentence in (19a) contains one Topic NP (i.e., *Minji-nun*) and one Focus NP (i.e., *sakwa-lul*). Therefore, according to Miyagawa's analysis, Topic NPs such as *Minji-nun* in (19a) are introduced into the derivation with no [foc] feature, while Focus NPs such as *sakwa-lul* in (19a) are introduced with a [+foc] feature. Since Miyagawa further assumes that Spec of α P in (19b) can host either a Topic NP or a Focus NP depending on which of the two [-foc] features on C is inherited by α , the following two sentences can equally be generated in his system:

- (20) a. if the *unvalued* [-foc] on C is inherited by α :
 [α P *Minji-nun* [_{TP} *sakwa-lul* [_{v*P} <*Minji-nun*> <*sakwa-lul*> *cohahanta*]]]
 b. if the *valued* [-foc] on C is inherited by α :
 [α P *sakwa-lul* [_{TP} *Minji-nun* [_{v*P} <*Minji-nun*> <*sakwa-lul*> *cohahanta*]]]]

In Miyagawa's system, an NP with a [+foc] feature such as the Focus NP *sakwalul* in (19a) invariably receives a focus interpretation regardless of the position it occupies in the structure (i.e., whether it occurs in Spec-T or Spec- α), while an NP with no such [foc] feature invariably receives a topic interpretation. If this assumption is on track, *Minji-nun* in both (20a) and (20b) would be expected to receive the same (Topic) interpretation, while *sakwa-lul* would be expected to receive the same (Focus) interpretation both in (20a) and (20b). However, the interpretation of (20a) and (20b) says otherwise:

- (21) a. *Minji-nun sakwa-lul cohahanta* (= 20a)
 M.-Top apple-Acc likes
 'Speaking of Minji, it is apples that she likes.'
 [*Minji* = Topic, *sakwa*= Focus]

- b. sakwa-lul Minji-nun cohahanta (= 20b)
apple-Acc M.-Top likes
'Speaking of apples, Minji likes them.'
[sakwa = Topic, Minji = Focus]

As shown above, each NP receives a different interpretation with respect to Topic/Focus depending on where it occurs in the sentence. An analysis such as Miyagawa's where an NP is assumed to receive an invariable interpretation with respect to Topic/Focus does not seem to account for the difference in interpretation of an NP depending on the position it occupies in the sentence.

Chapter 4

Topic and Focus in Korean: Description

4.1 Introduction

Korean is classified as an agglutinative language with a rich inventory of the so-called (nominal) ‘particles’¹ to indicate different grammatical functions of NPs such as subject and object or to add certain meanings to them.² Clausal information such as tense and force is indicated by verbal suffixes. All these nominal and verbal characteristics are represented in (1)³:

- (1) Minji-ka Chelswu-uy cha-ey skhlaychi-lul namki-ess-ta⁴
M.-Nom C.-Gen car-at scratch-Acc leave-Past-Decl

¹ Lee, C.-H. (2007) notes that the Korean Standard Dictionary lists about 140 nominal particles.

² In Korean traditional grammar, nominal particles are typically classified into the following three groups (Choi, D.-J. 1997):

(i) Structural Case particles:

Nominative: *-i/-ka*, Accusative: *-ul/-lul*, Genitive: *-uy*

(ii) Semantic Case particles:

Dative: *-eykey*, Locative: *-ey*, Instrumental: *-lo/-ulo*, etc.

(iii) Special particles or Delimiters:

Limitation: *-man* ‘only, solely’, Topic: *-un/-nun*, Inclusion: *-to* ‘also’, etc.

³ Throughout the dissertation, I use the Yale Romanization to transcribe Korean data.

⁴ Since our discussion does not hinge on the verbal suffixes, I will not gloss them in later examples unless necessary.

‘Minji made some scratches on Chelswu’s car.’

Although the canonical word order of Korean is almost uniformly assumed to be SOV⁵, the order of the NPs in a sentence is relatively free as long as the verb remains in sentence-final position⁶ (the in-situ (and the intermediate) position of a displaced element is indicated throughout by <angled brackets>):

(2) ‘Minji met Chelswu.’

a. S-O-V

Minji-ka	Chelswu-lul	mannassta
M.-Nom	C.-Acc	met

b. O-S-V

Chelswu-lul	Minji-ka	<Chelwsu-lul>	mannassta
C.-Acc	M.-Nom		met

A ‘free word order’ between NPs in a sentence as shown in (2a,b) is commonly referred to as ‘scrambling’ in the literature and various proposals have been made to account for this phenomenon.^{7,8} Notice, however, that despite the difference in

⁵ Few Korean scholars argue otherwise with respect to the canonical word order of Korean; see Lee, J.-S. (2007) who hypothesizes that the canonical word order of Korean is in fact SVO and attempts to derive the SOV surface order from Kayne’s (1994) ‘Linear Correspondence Axiom’.

⁶ In principle even verbs can be displaced, for example, to sentence-initial position:

(i) Po-ass-ta kunye-lul kukcang-eyse <Po-ass-ta>
see-Past-Decl she-Acc movie.theater-at
‘I saw her in a/the movie theater.’

However, the sentence in (i) sounds so archaic that it can only be found, for example, in poetry.

⁷ Ross (1967) first coined the term ‘scrambling’ to refer to these free word order phenomena.

the relative order between the two NPs, the meaning of (2a) and (2b) is essentially the same, if not exactly the same. That is, their difference in word order does not result in meaningful semantic differences between the two.

Notice the phrase ‘essentially the same, if not exactly the same’ in the previous sentence. I say this because one could argue that the object *Chelswu-lul* is interpreted as Focus in (2a), while in (2b) the focused NP is the subject *Minji-ka*.⁹ Therefore, the argument would entail that the meaning of (2a) and (2b) is in fact different. This line of argument would have a point if one assumes the Nuclear Stress Rule (NSR; Chomsky and Halle 1968, Cinque 1993) which states that ‘the sentential nuclear stress falls on the most deeply embedded¹⁰ constituent’. It is the object *Chelswu-lul* and the subject *Minji-ka* that are most deeply embedded in (2a) and (2b), respectively (if one further assumes that the verb in Korean raises (at least) to v).

Plausible as it may seem, I reject the argument just described above for the following two reasons. First and foremost, sentences like (2a,b), where both NPs are Case-marked, are a typical example of ‘sentence-focus’ in Korean. As discussed in chapter 3, no particular NP is associated with a focus interpretation in a

⁸ Minimalist approaches to scrambling can be classified into the following three groups:

- (i) Optional Movement Approach (Saito & Fukui 1998, Saito, 2005)
- (ii) Feature-Checking Approach (Miyagawa 2005)
- (iii) Base-generation Approach (Boskovic and Takahashi 1998, Fanselow 2001)

⁹ In this case, (2a) would be roughly translated as “it was Chelswu who Minji met” and (2b) as “it was Minji who met Chelswu.”

¹⁰ Depth of embedding can be defined as below:

Depth of Embedding:

A syntactic constituent, X, is more deeply embedded than some other syntactic constituent, Y, if the number of the nodes that dominate X is greater than that of Y.

sentence-focus construction; if it were, the sentence would not be interpreted as sentence-focus to begin with; the sentence should rather be understood as one that contains an ‘argument’ focus. As will be discussed in detail in what follows, presence of a *nun*-marked NP in a clause¹¹ is necessary for a Case-marked¹² NP in the same clause to be interpreted as (an argument) Focus. Therefore, sentences like (2a,b), which contain no *nun*-marked NP, sound deviant if more stress is placed on one over the other NP. Second, even if we recognize that the object *Chelwsu-lul* is interpreted as Focus in (2a), we can get the same interpretation from (2b) as well by placing more stress on *Chelwsu-lul*.¹³ Even in this case, however, a degree of deviance remains the same. For these reasons, I reject the claim that a particular (Case-marked) NP is associated with a focus interpretation in a ‘sentence-focus’ construction, and hypothesize instead that none of the (Case-marked) NPs are associated with a topic or focus interpretation in this case.

Compare now (2) with (3) below:

¹¹ In this chapter, we assume a clause to refer to a CP. In Chapter 5, we will specify the domain in which the presence of a *nun*-marked NP is required.

¹² We confine our discussion of Case of an NP to ‘structural’ Case such as Nominative and Accusative (as opposed to ‘inherent’ Case). Although we (will often) refer to an NP as ‘Case-marked’, it does not mean that we assume that Case-feature of an NP contributes to the (semantic) interpretation of the NP at the CI-interface. This is because (structurally assigned) Case-feature of an NP is uninterpretable to the CI-interface and it is thus taken away (by the operation Transfer) before reaching the CI-interface.

¹³ In other words, the NSR does not apply in Korean.

(3) a. **S-O-V**

[Chelswu = Focus¹⁴]

Minji-ka Chelswu-nun mannassta

M.-Nom C.-NUN¹⁵ met

‘Minji met Chelswu (e.g., but she didn’t meet others).’

b. **O-S-V**

[Chelswu = Topic]

Chelswu-nun Minji-ka <Chelwsu-nun> mannassta

C.-NUN M.-Nom met

‘Speaking of Chelswu, it was Minji who met him.’

The only difference between (2a,b) and (3a,b) is the particle attached to the object *Chelswu*, i.e., in (2a,b) the object *Chelswu* is marked with the Accusative particle ‘-lul’, whereas it is marked with the so-called Topic marker ‘-nun’ in (3a,b).¹⁶ Unlike between (2a) and (2b), however, there are notable semantic differences between (3a) and (3b). As shown in the English translations, the *nun*-marked object *Chelswu* in (3a) is interpreted as Focus, whereas it is interpreted as Topic in (3b) where it occurs in sentence-initial position.¹⁷ This interpretive difference between the two

¹⁴ Here I do not indicate the distinction between I-Focus and C-Focus or between P-Topic and C-Topic because our discussion in this section does not hinge on the distinction. Sections 4.3 and 4.4 are devoted to these distinctions in Korean.

¹⁵ Here I gloss the so-called Topic marker/particle ‘-(n)un’ as it is, -(N)UN, but the particle will be (re-)analyzed as a ‘Contrast’ marker in section 4.2. The choice between *-un* and *-nun* is determined phonologically: the former is used when the preceding syllable ends in a consonant and the latter when it ends in a vowel.

¹⁶ If the particle is to be the ‘only’ difference, it must be presupposed that the subject in (2a,b) occupies the same position as the subject in (3a,b) and the displaced object in (2b) occupies the same position as the object in (3b).

¹⁷ Similar semantic differences are observed in Japanese where the particle *-wa* is widely assumed to be the Japanese counterpart to the Korean *-nun*:

- (i) John-ga sono hon-wa katta.
J.-Nom that book-WA bought

objects leads to their (in)felicity as an answer to each question in (4). (Pragmatic oddity is indicated throughout by the symbol #):

(4) Q1: *Who did Minji meet?*

a. [**Minji = Topic, Chelswu = Focus**]

Minji-ka Chelswu-nun mannassta (= 3a)

M.-Nom C.-NUN met

‘Speaking of Minji, she met Chelswu (e.g., but she didn’t meet others).’

b. [**Chelswu = Topic, Minji = Focus**]

#Chelswu-nun Minji-ka mannassta (= 3b)

C.-NUN M.-Nom met

‘Speaking of Chelswu, it was Minji who met him.’

Q2: *Who did Chelswu meet?*

c. [**Minji = Topic, Chelswu = Focus**]

#Minji-ka Chelswu-nun mannassta (= 3a)

M.-Nom C.-NUN met

‘Speaking of Minji, she met Chelswu (e.g., but she didn’t meet others).’

d. [**Chelswu = Topic, Minji = Focus**]

Chelswu-nun Minji-ka mannassta (= 3b)

C.-NUN M.-Nom met

‘Speaking of Chelswu, it was Minji who met him.’

As shown in (4), only (4a)=(4c) can serve as a felicitous answer to Q1 because the *nun*-marked object *Chelswu* can be interpreted as Focus only when preceded¹⁸ by another NP (i.e., *Minji-ka*). (4b)=(4d) shows that the object *Chelswu-nun* cannot be

-
- | | |
|---|--|
| ‘John bought that book (e.g., he didn’t buy another book).’ | [sono hon = Focus] |
| (ii) Sono hon-wa John-ga <sono hon-wa> katta. | |
| that book-WA J.-Nom bought | |
| ‘Speaking of that book, John bought it.’ | [sono hon = Topic] |
| | [based on Vermeulen, 2008: 1-2, (1)/(2)] |

¹⁸ Although we use the term ‘precedence’ here (for ease of exposition), it should be understood in terms of ‘structural hierarchy’. That is, ‘A precedes B’ should be read as ‘A is located higher than B in the structure’.

interpreted as Focus unless it is preceded by any other NP; it is rather interpreted as Topic (i.e., *Chelswu* is what the sentence is about in this case). Consequently, (4b)=(4d) cannot serve as a felicitous answer to Q1.

Notice also the change in the interpretation of the Case-marked subject *Minji-ka* in (4), depending on its structural position relative to the *nun*-marked object. In (4c), where the subject *Minji* occurs in sentence-initial position followed by the *nun*-marked object *Chelswu*, it is interpreted as Topic. Therefore, (4c) cannot serve as a felicitous answer to Q2. If the subject *Minji* occurs 'preceded' by the *nun*-marked object as shown in (4d), however, it is now interpreted as Focus and thus (4d) can serve as a felicitous answer to Q2.

Our discussion so far about the absence or the presence of semantic differences between (2) and (3)/(4), respectively, seems to support, at least partially, the typological classification Li and Thompson (1976; henceforth L&T) put forward. Based on whether the sentence organization hinges on the prominence of subject (i.e., 'subject-prominent') or topic (i.e., 'topic-prominent'), L&T classify languages as belonging to one of the following four types:

- (5) a. **Subject-prominent (Sp) Languages:** Indo-European, Niger-Congo, etc.
The basic structure of sentences favors a description in which the grammatical relation 'subject-predicate' plays a major role.
- b. **Topic-prominent (Tp) Languages:** Chinese, Lahu (Lolo-Burmese), etc.
The basic structure of sentences favors a description in which the grammatical relation 'topic-comment' plays a major role.
- c. **Sp & Tp Languages:** Japanese, Korean, etc.
There are two equally important distinct sentence constructions, the subject-predicate construction and the topic-comment construction.
- d. **Neither Sp nor Tp Languages:** Tagalog, Ilocano, etc.
The subject-topic distinction is no longer observed in any sentence types.

We saw in (2) that a change in word order between the two NPs in a sentence does not lead to any semantic difference if both NPs are Case-marked. We saw in (3) and (4), however, that a semantic difference does arise if one of the two NPs in a sentence is marked with the so-called topic marker ‘-*nun*’. The fact that the presence and the structural position of a *nun*-marked NP in a sentence plays a crucial role in altering the semantics of the sentence seems to grant a justification to L&T’s classification of Korean, along with Japanese (see fn. 16), as one of the (subject-prominent and) topic-prominent languages. Nevertheless, I say that our discussion so far supports L&T’s claim ‘partially’ because 1) we have not shown how subjecthood contributes to determining sentence structure in Korean, and 2) we will (re-)analyze the so-called ‘topic’ marker ‘-*nun*’ as a marker of ‘Contrast’ (in section 4.2 below).

Consider now a different aspect of a topic or focus interpretation of NPs in Korean as compared to that of English:

- (6) a. John met Mary.
 b. John-un Minji-lul mannassta
 J.-UN M.-Acc met
 ‘Speaking of John, he met Minji.’
 [John = Topic; Minji = Focus]

As discussed in chapter 3, a topic or focus interpretation of an NP in a sentence cannot be unambiguously determined in languages like English if the sentence is presented in isolation without any given context. It is especially so if the sentence as in (6a) is presented in writing (i.e., without any phonological cues). Consequently, we cannot identify for sure whether *John* (or *Mary*) in (6a) is the

Topic or the Focus of the sentence until we are presented with some relevant contextual/phonological cues. In languages like Korean (and presumably Japanese as well), however, a topic or focus interpretation of an NP in a sentence can be unambiguously identified even without the aid of context (and/or phonological cues). This is so because a topic or focus interpretation of an NP can be unambiguously identified by the particle attached to the NP and the structural position the NP occupies in the sentence. For example, the subject *John* in (6b), which is marked with the particle ‘-*nun*’ and occurs in sentence-initial position, is unambiguously interpreted as Topic, while the object *Minji*, which is Case-marked and occurs preceded by the *nun*-marked *John*, is unambiguously interpreted as the Focus of the sentence.

In what follows, I will first examine in Section 4.2 the nature of the so-called Topic particle ‘-*nun*’ and (re)-analyze it as the marker of Contrast. In Section 4.3, I will discuss how Topic is encoded in Korean by examining distributional and morphological characteristics of Topic NPs. Also, I will discuss two different methods by which the ambiguity between Plain Topic and Contrastive Topic is resolved. In Section 4.4, I will discuss how Focus is encoded in Korean. I will also discuss distributional properties of Contrastive Focus and Information Focus. Section 4.5 will summarize distributional properties of (C-/P-)Topic and (C-/I-)Focus. We will revisit the particle *-nun* in Section 4.6 and discuss distributional and scopal properties of *nun*-marked NPs.

4.2 Is *-nun* a Topic marker?

The particle '*-nun*' has been traditionally analyzed by many Korean linguists as a particle whose sole function is to mark Topic. Furthermore, it has been assumed that an NP can serve as Topic only if it is marked with the particle '*-nun*' (Lee, S.-N. 1966, Yang, D.-W. 1974, Jung, Y.-C. 1990, Han, C.-H. 1998, among many others). However, there has been an increasing amount of literature suggesting the particle '*-nun*' should be differently analyzed (Choi, H.-W 1997, Oh, C.-S. 2009). Consider first (7), where lower copies of a displaced element are indicated by <angled brackets>:

- (7) a. Minji-nun Chelswu-lul cohahanta
M.-NUN C.-Acc likes
'Speaking of Minji, it is Chelswu who she likes.'
[Minji = P-Topic]
'As for Minji, it is Chelswu who she likes (e.g., and as for Mija, it is Minswu who she likes).'
- b. Minji-ka Chelswu-nun cohahanta
M.-Nom C.-NUN likes
'Minji likes Chelswu (e.g., but she doesn't like others)
[Chelswu= C-Focus]
- c. Chelswu-nun Minji-ka <Chelswu-nun> cohahanta
C.-NUN M.-Nom likes
'Speaking of Chelswu, it is Minji who likes him.'
[Chelswu = P-Topic]
'As for Chelswu, it is Minji who likes him (e.g., and as for Minswu, it is Mija who likes him).'
- [Chelswu = C-Topic]

Putting aside the difference between P-Topic and C-Topic for now, the *nun*-marked subject *Minji* in (7a) receives a topic interpretation. In (7b), however, the object *Chelswu* does not receive such a topic reading despite the fact that it is marked with the same particle ‘-*nun*’. Notice further that if the *nun*-marked object *Chelswu* is displaced to the front of the sentence and consequently occupies the sentence-initial position as shown in (7c), it is no longer interpreted as C-Focus; instead, it gets a topic reading just like the *nun*-marked subject *Minji* in (7a). The assumption that the particle ‘-*nun*’ invariably marks Topic does not seem to account for 1) why certain NPs cannot have a topic reading even when marked with -*nun* (e.g., *Chelswu-nun* in (7b)), and 2) why the *nun*-marked object NPs (e.g., *Chelswu-nun* in (7c)) obtain a topic reading when they are displaced to sentence-initial position.

Notice, however, that all the *nun*-marked NPs in (7) share a certain meaning in common regardless of the position they occupy in the sentence, that is, they all share a meaning of Contrast no matter where they occur in the sentence.¹⁹ This seems to suggest that the particle ‘-*nun*’ is a marker of Contrast rather than a (unique) Topic marker. Throughout our discussion, I will therefore assume the following on the nature of the particle ‘-*nun*’:

(8) The particle ‘-*nun*’ in Korean is a Contrast marker.

So-called Echoed (or Contrastive) Verb Constructions (ECV) in Korean further support the assumption in (8) (see also Cho, S.-Y. et al. 2004, Aoyagi 2006):

¹⁹ The P-Topic reading of *Minji* and *Chelswu* in (7) will be discussed in section 4.3.2.1.

- (9) a. Minji-ka wul-ki-nun wul-ess-ta
 M.-Nom cry-Nmlz-NUN cry-Past-Decl
 'Minji did cry (e.g., but she did not make any sound).'
 [cry = C-Focus]
- b. Wul-ki-nun Minji-ka <wul-ki-nun> wul-ess-ta
 cry-Nmlz-NUN M.-Nom cry-Past-Decl
 'Speaking of crying, it was Minji who did it.'
 [cry = P-Topic]
 'As for crying, it was Minji who did it (e.g., but as for laughing, it was ...).'
 [cry = C-Topic]

In the ECV constructions, the verb is duplicated in the form of $V_{\text{ROOT-}ki-nun} V_{\text{ROOT}}$, where the first V_{ROOT} is suffixed by the nominalizer *'-ki'* followed by the particle *'-nun'* and the second V_{ROOT} is inflected for tense and force. When the verb in a sentence is doubled (or echoed) in this way, it is interpreted as C-Focus as shown in (9a). Notice, however, if the *nun*-marked verb is displaced to the sentence-initial position as shown in (9b), it loses a C-Focus reading and gains a (C-/P-)Topic reading. This interpretive change of the *nun*-marked verb in ECV constructions parallel with that of the *nun*-marked object as we saw in (7b,c). Notice further that just like the object *Chelswu-nun* in (7b,c), the *nun*-marked verbs in (9a,b) also share a 'contrastive' reading regardless of the position they occupy in the sentence.

Evidence that shows that topichood of an NP does not necessarily require the particle *'-nun'* comes from the following data:

- (10) a. Minji-nun Chelswu-nun cohahanta
 M.-NUN C.-NUN likes
 'Speaking of Minji, she likes Chelswu (e.g., but she doesn't like others).'
 [Minji = Topic]

- b. Minji-ka Chelswu-nun cohahanta
 M.-Nom C.-NUN likes
 ‘Speaking of Minji, she likes Chelswu (e.g., but she doesn’t like others).’
 [Minji = Topic]

In (10b), the subject *Minji* is marked, not with the so-called ‘topic’ particle ‘-nun’ but with the Nominative Case particle ‘-ka’. Nevertheless, it is interpreted as Topic just like the *nun*-marked subject *Minji-nun* in (10a).

Finally, if the particle ‘-nun’ is indeed a marker of Contrast, it would be expected that it cannot be attached to universal quantifiers such as *all* and *every* (as compared to existential quantifiers such as *most* and *a few*) because ‘all’ cannot be contrasted with ‘none’²⁰. The data below confirm this prediction:

- (11) a. motu-ka kkaman paci-lul iphko.iss.essta
 all-Nom black pants-Acc was.wearing
 ‘All (or everyone) was wearing black pants.’
 b. *motu-nun kkaman paci-lul iphko.iss.essta
 all-NUN black pants-Acc was.wearing
 c. taypwupwun/ilpwu-nun kkaman paci-lul iphko.iss.essta
 most/a.few-NUN black pants-Acc was.wearing
 ‘Most/A few was wearing black pants.’

²⁰ The particle ‘-nun’ cannot be attached to the Negative Polarity Item ‘*amwu*’ which is interpreted as ‘nobody’ when associated with the negative morpheme ‘*an*’:

- (i) *amwu-nun achim-ul an mekessta
 anyone-NUN breakfast-Acc Neg ate
 ‘Nobody had breakfast.’

(11b) shows that unlike the Case particle ‘-ka’, the particle ‘-nun’ cannot be attached to the universal quantifier *motu* ‘all’.²¹

The discussion so far shows that 1) *nun*-marked NPs are not always interpreted as Topic in Korean (i.e. (7)-(9)), and 2) Topics are not always marked with ‘-nun’ (i.e. (10)). Furthermore, the fact that the particle ‘-nun’ cannot be attached to universal quantifiers as shown in (11) cannot be accounted for by the assumption that the particle ‘-nun’ is a unique Topic marker. Therefore, I will assume that the so-called Topic marker ‘-nun’ is in fact not a Topic marker but a marker of ‘Contrast.’ I will thus gloss it as ‘Cont’ in what follows.

4.3 Topic in Korean

4.3.1 Encoding of Topic in Korean

Consider (12):

- (12) a. Minji-nun Chelswu-lul cohahanta
 M.-Cont C.-Acc likes
 ‘Speaking of Minji, it is Chelswu that she likes.’
 [Minji = Topic]
 b. Minji-ka Chelswu-lul cohahanta
 M.-Nom C.-Acc likes

²¹The mere presence of a universal quantifier does not necessarily rule out the use of ‘-nun’:

- (i) motun selchilyu-nun kyewulcam-ul canta
 all rodents-NUN winter.sleep-Acc sleep
 ‘All rodents hibernate.’

The particle ‘-nun’ can be attached to the NP *selchilyu* ‘rodents’ in (i) even if the NP is modified by the universal quantifier. This is so because in principle rodents can be contrasted with, for example, crustaceans.

- ‘Minji likes Chelswu.’
 [Minji, Chelswu = neither Topic nor Focus; part of Sentence-Focus]
- c. Minji-ka Chelswu-nun cohahanta
 M.-Nom C.-Cont likes
 ‘Speaking of Minji, she likes Chelswu (e.g., but she doesn’t like others).’
 [Minji = Topic, Chelswu = C-Focus]
- d. Chelswu-nun Minji-ka <Chelswu-nun> cohahanta
 C.-Cont M.-Nom likes
 ‘Speaking of Chelswu, it is Minji who likes him.’
 [Chelswu = Topic, Minji = I-Focus]

The only difference between (12a) and (12b) is the particle attached to the subject *Minji*. That is, *Minji* in (12a) is marked with ‘-nun’, whereas it is marked with the Nominative Case particle ‘-ka’ in (12b). Nonetheless, the different particle leads to a different interpretation of *Minji* as indicated in (12a,b). What this suggests is that the particle ‘-nun’ seems to play a role in rendering an NP interpreted as the Topic of a sentence despite its being a Contrast marker.

Notice, however, that the object *Chelswu-nun* in (12c), where it is preceded by another NP, *Minji-ka*, is not interpreted as Topic but as Focus, despite the fact that the object is marked with the same particle ‘-nun’ as *Minji* in (12a). Notice further that just like *Minji-nun* in (12a), the object *Chelswu-nun* in (12d), which now occurs in sentence-initial position and hence is not preceded by any other NP, is no longer interpreted as Focus but it receives a topic reading. All this seems to suggest that what is involved in determining a topic interpretation of NPs is not the ‘type’ of the particle itself attached to the NP (i.e., Case particle ‘-ka’ vs. Contrast marker ‘-nun’), but the following two conditions: 1) the ‘presence’ of a *nun*-marked NP, and 2) the structural position an NP occupies in the sentence. More specifically, I claim that in order for an NP, X, to be interpreted as Topic, 1) the clause that contains X

must contain a *nun*-marked NP, and 2) no other NP in the same clause precedes X. The following data support this claim:

- (13) a. Minji-ka Chelswu-lul cohahanta (= (12b))
 M.-Nom C.-Acc likes
 'Minji likes Chelswu.'
 [Minji, Chelswu = neither Topic nor Focus]
- b. Chelswu-*nun* Minji-ka cohahanta (12d)
 C.Cont M.-Nom likes
 'Speaking of Chelswu, it is Minji who likes him.'
 [Chelswu = Topic, Minji = Focus]
- c. Minji-ka Chelswu-*nun* cohahanta (12c)
 M.-Nom C.-Cont likes
 'Speaking of Minji, she likes Chelswu (e.g., but she doesn't like others).'
 [Minji = Topic]
- d. Minji-*nun* Chelswu-*nun* cohahanta
 M.-Cont C.-Cont likes
 'Speaking of Minji, she likes Chelswu (e.g., but she doesn't like others).'
 [Minji = Topic]

Condition (1) above predicts that no NP in a clause can be associated with a topic interpretation if the clause does not contain a *nun*-marked NP. This prediction is borne out by (13a), where there is no *nun*-marked NP and thus neither the subject *Minji* nor the object *Chelswu* is interpreted as Topic. If Condition (2) is correct, it is predicted that even when the clause contains a *nun*-marked NP, an NP, X, including the *nun*-marked NP itself, cannot be interpreted as Topic if X is preceded by another NP in the same clause. This prediction is also borne out by (13b) where the subject *Minji* is not interpreted as Topic despite the presence of the *nun*-marked NP *Chelswu-nun*. (13c,d) show that determination of a topic interpretation of an NP,

X, is blind to the type of the particle attached to X; X in a clause is interpreted as Topic as long as the clause contains a *nun*-marked NP and X is not preceded by any other NP in the same clause.

In summary, I present the following (descriptive) conditions on topic interpretation of NPs in Korean.

(14) **Conditions on Topic NPs in Korean** (*to be revised in Chapter 5*)

In order for an NP, X, to be interpreted as Topic,

- (i) the clause that contains X must contain a *nun*-marked NP²², and
- (ii) No other NP in the same clause precedes X.

4.3.2 Ambiguity between Plain Topic and Contrastive Topic

The ambiguity in the interpretation of *nun*-marked Topic NPs between P-Topic and C-Topic, though briefly discussed in section 4.2, has not been discussed in detail. So I will devote this section to that discussion. Consider (15):

(15) Minji-nun sa.i.pha.i yenghwa-lul cohahanta

M.-Cont sci-fi movies-Acc likes

- a. 'Speaking of Minji,²³ she likes sci-fi movies.'

[Minji = P-Topic]

- b. 'As for Minji, she likes sci-fi movies (e.g., as for Chelswu, he likes horror movies.)' [Minji = C-Topic]

²² It does not matter whether the *nun*-marked NP is X itself or some other NP.

²³ For expository purposes, I will translate the P-Topic and C-Topic reading using the phrases 'Speaking of X' and 'As for X', respectively, to show their different meaning in the English translation.

As indicated in each English translation in (15a,b), the subject *Minji-nun* can be interpreted in two different ways. In the first reading as shown in (15a), *Minji* is interpreted as a plain Topic (P-Topic). In other words, no alternative topics other than *Minji* are implied (by the speaker/writer); *Minji* is one and only entity that is talked about in this case. The other interpretation *Minji* can receive is a contrastive Topic (C-Topic) reading in which unlike in (15a), an alternative Topic other than *Minji* is implied in this case (and hence the continuation in (15b) is possible).²⁴ The usual question that arises is why this is so.

In what follows, I will show that the so-called ambiguity of *nun*-marked Topic NPs between P-Topic and C-Topic is just apparent and argue for the following two points:

- (16) a. *Nun*-marked Topic NPs are inherently contrastive (i.e., they are C-Topics).
 b. The seeming ambiguity between P- and C-Topic of a *nun*-marked Topic NP results from suppression of the contrastive meaning of the NP by two other factors: one is discourse-related pragmatic (or contextual) factors and the other is the presence of C-Focus.

²⁴ Similar pattern is observed in the *wa*-marked NPs in Japanese (see also fn.16 in this chapter):

- (i) John-wa sono hon-o yonda
 J.-WA that book-Acc read
 ‘Speaking of John, he read the book.’ [John = P-Topic]
 ‘As for John, he read the book (e.g., but Mary didn’t).’ [John = C-Topic]
 (based on Deguchi 2008)

4.3.2.1 Suppression of Contrastive Meaning - Discourse Effects

Consider the following conversation between K and L:

- (17) (Context: *K, L and Minji have been close friends to each other, living in the same apartment for the past 2 years. None of the three had a car but Minji purchased a car a couple of days ago and K and L know about it. However, they don't know whether the car Minji bought is brand-new or pre-owned because they haven't seen the car yet. Coming back from grocery shopping one afternoon, K flings open the door of L's bedroom and says the following*):

a. #Minji-nun say cha-lul sa-ass-tay

M.-nun new car-Acc buy-Past-RPOR

'Minji bought a brand new car.'

Lit.: 'I heard that Minji bought a brand new car.'

[Minji = Topic, cha = I-Focus]

b. Minji-ka say cha-lul sa-ass-tay

M.-Nom new car-lul buy-Past-RPOR

'Minji bought a brand new car.'

Lit.: 'I heard that Minji bought a (brand) new car.'

[Minji, cha = neither Topic nor Focus; part of Sentence-Focus]

Let us examine the structure of K's statement in (17a). The sentence contains a *nun*-marked NP (i.e., the subject *Minji-nun*) which is preceded by no other NP in the sentence; it is thus interpreted as Topic (see (14) above). The Case-marked object *cha-lul*, which is preceded by the *nun*-marked subject, is interpreted as I-Focus, providing new information (which will be discussed in Section 4.4.1 below). Both the subject and the object in (17a) not only occupy the legitimate place for their interpretation but they are also marked with the legitimate particle. If 1) *nun*-marked NPs are indeed 'inherently' ambiguous between P-Topic and C-Topic and 2) the choice between these two Topic readings can only be made by contextual

cues (or pragmatic factors), the Topic *Minji-nun* in (17a) can surely be interpreted (by L) as P-Topic given the context (i.e., K is talking about *Minji*, whom both K and L know well, that she bought a brand new car). Consequently, there should not be anything wrong with the statement; Nonetheless, the pragmatic oddity of (17a) indicates otherwise.

To account for the pragmatic oddity as observed in (17a), I propose the following:

(18) Meaning of *nun*-marked Topic NPs

Nun-marked Topic NPs are intrinsically contrastive (i.e., C-Topic).

(19) Pragmatic Suppression of Contrastive Meaning of *nun*-marked Topic NPs

Contrastive meaning of a *nun*-marked Topic NP can be suppressed by pragmatic factors specific enough to suppress it.

With (18) and (19), the pragmatic oddity of (17a) can be accounted for as follows: (17a) sounds (pragmatically) odd, despite its legitimate structure with respect to encoding of Topic and Focus, not because the interpretation of the Topic *Minji-nun* is (inherently) ambiguous between P- and C-Topic, but because the contextual cues given in (17) are not specific enough to be able to suppress the (intrinsic) contrastive meaning of the C-Topic *Minji-nun*. Therefore, L understands the Topic *Minji-nun* as C-Topic (and, presumably, L thus waits for K to continue so that L can figure out what the C-Topic *Minji-nun* is contrasted with).

Compare now the context in (17) with that of (20) below:

(20) (Context: *Tell me about Minji. What (kind of movies) does Minji like?*)

Minji-nun sa.i.pha.i yenghwa-lul cohahanta

M.-Cont sci-fi movie-Acc likes

‘Speaking of Minji, she likes sci-fi movies.’

[Minji = P-Topic *only*]

Unlike the context in (17), the context in (20) is specific enough to suppress the contrastive meaning of the Topic *Minji-nun*. In other words, requests such as ‘*Tell me about X*’ preempts the contrastive interpretation of the Topic *Minji-nun* (or force *Minji-nun* not to be interpreted as contrastive).

In summary, I argue that *nun*-marked Topic NPs are ‘intrinsically’ contrastive (i.e., C-Topic) but its contrastive meaning can be suppressed (i.e., it turns into non-contrastive P-Topic) only if the given contextual cues are specific enough to allow that.

4.3.2.2 Suppression of Contrastive Meaning - Presence of C-Focus

In the previous section, we saw that the contrastive meaning of C-Topic can be suppressed by pragmatic factors (or contextual cues). Consider now the following examples which show that the contrastive meaning of C-Topic can also be suppressed by the presence of C-Focus:

(21) a. Minji-ka sa.i.pha.i yenghwa-nun cohahanta

M.-Nom sci-fi movie-Cont likes

‘Speaking of Minji, she likes sci-fi movies.’

[Minji = P-Topic (only)]

- b. Minji-nun sa.i.pha.i yenghwa-nun cohahanta
 M.-Cont sci-fi movie-Cont likes
 ‘Speaking of Minji, she likes sci-fi movies.’
 [Minji = P-Topic (only)]

P-Topic interpretation of the Topic *Minji-ka* in (21a) is surely expected given the fact that *Minji-nun* is not marked with the Contrast particle ‘-nun’ to begin with. What is thus peculiar is the interpretation of the *nun*-marked Topic *Minji-nun* in (21b) because we argued in the previous section that the interpretation of *nun*-marked Topics are inherently contrastive (i.e., C-Topic) and their contrastive meaning can be suppressed only by specific contextual cues. As shown, however, no such (specific) context is given in (21b) as one we saw in (20). Nonetheless, the C-Topic *Minji-nun* in (21b) somehow loses its contrastive meaning, so that it is interpreted only as P-Topic.²⁵ To account for this type of loss of contrastive meaning, let us first compare (20) with (21b), repeated here as (22a) and (22b), respectively:

- (22) a. (Context: *Tell me about Minji. What (kind of movies) does Minji like?*)
 Minji-nun sa.i.pha.i yenghwa-lul cohahanta (20)
 M.-Cont sci-fi movies-Acc likes
 ‘Speaking of Minji, it is sci-fi movies that she likes.’
 [Minji = P-Topic, yenghwa = I-Focus]
- b. (No context given)
 Minji-nun sa.i.pha.i yenghwa-nun cohahanta (21b)
 M.-Cont sci-fi movie-Cont likes
 ‘Speaking of Minji, she likes sci-fi movies (e.g., but she doesn’t like).’
 [Minji = P-Topic, yenghwa = C-Focus]

²⁵ To my knowledge, little attention, if any, has been paid to the structure where the subject and the object are both marked with ‘-nun’.

As discussed above, the contrastive meaning of the Topic *Minji-nun* in (22a) is suppressed by the given context; the context is specific enough to force the Topic *Minji-nun* not to be contrastively interpreted. Interestingly, however, the *nun*-marked Topic *Minji-nun* in (22b) also loses its contrastive meaning even without any given context that is specific enough to suppress the contrastive meaning.

To account for this unexpected loss of contrastive meaning of the Topic *Minji-nun* in (22b), let us first examine the difference between (22a) and (22b). Context aside, the only difference between (22a) and (22b) is the particle attached to the Focus NP, *yenghwa* ‘movie’, i.e., it is Case-marked in (22a), while it is *nun*-marked in (22b). The different choice of the particle, combined with the presence of the preceding NP, leads to different interpretations of the two objects: the Case-marked object *yenghwa-lul* in (22a) is interpreted as I-Focus, while the *nun*-marked counterpart in (22b) is interpreted as C-Focus (which will be discussed in more detail in Section 4.4.1 below). Let us then assume that the presence of (a *nun*-marked) C-Focus can somehow affect the interpretation of the NP that precedes it. The following examples seem to support our assumption:

- (23) a. *Minji-ka sa.i.pha.i yenghwa-nun cohahanta* (= (21a))
 M.-Nom sci-fi movie-Cont like
 ‘Speaking of Minji, she likes sci-fi movies (e.g., but she doesn’t like).’
 [Minji = P-Topic]
- b. *Minji-ka sa.i.pha.i yenghwa-lul cohahanta*
 M.-Nom sci-fi movie-Acc like
 ‘Minji likes sci-fi movies.’
 [Minji = neither Topic nor Focus]

As in (22a) and (22b), the particle attached to the object *yenghwa* is the only difference between (23a) and (23b). In other words, the Case-marked subject *Minji-ka* in (23a) is followed by the *nun*-marked C-Focus *yenghwa-nun*, while the Case-marked subject in (23b) is not, which leads to the different interpretations of the subject *Minji* in each sentence.²⁶

Based on the discussion so far, I will assume that the presence of C-Focus in a clause can also suppress the contrastive meaning of *nun*-marked Topic NPs, so that C-Topics are interpreted only as P-Topics. (I will present an alternative (structural) analysis of this phenomenon in Chapter 5.)

4.4 Encoding of Focus in Korean

A focus interpretation of NPs in Korean is encoded in two different ways. Consider (24) below:

(24) (Context: *What (kind of alcoholic drinks) does Minji like?*)

a. *Minji-ka/nun wa.in-un cohahanta*

M.-Nom/Cont wine-Cont like

‘Speaking of Minji, she likes wine (e.g., but she doesn’t like whiskey).’

[wine = C-Focus]

b. *Minji-nun wa.in-ul cohahanta*

M.-Cont wine-Acc likes

‘As for Minji²⁷, it is wine that she likes.’

[wine = I-Focus]

²⁶ It should be noted that unlike in (22b), the presence of C-Focus does not contribute to the suppression of contrastive meaning the Topic *Minji-ka* in (23a). This is because the Topic *Mjinji* in (23a) is Case-marked, not marked with ‘-*nun*’ and therefore it does not bear a contrastive meaning in the first place.

²⁷ Since this section focuses mainly on the interpretation of Focus NPs, the contrastive meaning of C-Topic will not be indicated in the translation.

In chapter 3, we defined our Focus to refer to the NP that answers the *wh*-part of a preceding *wh*-question. According to this definition, the objects *wa.in-un* and *wa.in-ul* are the Focus NP in (24a) and (24b), respectively.

Notice the different particle attached to each Focus NP in (24): the object *wa.in* in (24a) is marked with the Contrast marker ‘*-nun*’, while it is marked with the Accusative Case particle ‘*-ul*’ in (24b). This different choice of the particle leads to the different interpretation of each Focus NP (i.e., C-Focus vs. I-Focus) as indicated in the English translations. In what follows, I will discuss in more detail about morphological and distributional properties of Focus NPs in Korean.

4.4.1 Information Focus and Contrastive Focus

Consider (24) again, repeated here as (25):

(25) (Context: *What (kind of alcoholic drinks) does Minji like?*)

a. Minji-nun wa.in-un cohahanta

M.Cont wine-Cont likes

‘Speaking of Minji, she likes wine (e.g., but she doesn’t like whiskey).’

[wine = C-Focus]

b. Minji-nun wa.in-ul cohahanta

M.-Cont wine-Acc likes

‘As for Minji, it is wine that she likes.’

[wine = I-Focus]

As briefly discussed in the previous section, the object *wa.in* in (25a) and (25b) receives a focus interpretation.²⁸ Therefore, both (25a) and (25b) can equally serve as a felicitous answer to the question in (25).

However, there exists some difference in the interpretation of the two objects, *wa.in*, between (25a) and (25b). In (25a), for example, the object *wa.in* is interpreted as C-Focus. In other words, the referent of some alternative Focus NP other than ‘wine’ that *Minji* might (not) like is implied when the Focus NP, *wa.in*, is marked with *-nun*. On the contrary, the Case-marked Focus NP, *wa.in-un*, in (25b) bears no such contrastive implications; it is interpreted only as I-Focus, providing the relevant information about the *wh*-part of the preceding *wh*-question.^{29,30} What this seems to suggest is that the choice between a Case particle and the Contrast marker plays an important role in distinguishing between two types of Focus (i.e., I-Focus and C-Focus). More specifically, the Focus NP must be marked with the Contrast marker ‘*-nun*’ in order to be associated with C-Focus (i.e., (25a), while it must not if it is to be interpreted as I-Focus (i.e., (25b)). Based on this observation, I propose the following (descriptive) condition on I-Focus and C-Focus:

²⁸ This is so even without any given context.

²⁹ As noted in fn. 12, we do not assume that Case-feature of an NP contributes in any way to a topic or focus interpretation at the CI-interface.

³⁰ Case-particles of NPs are often omitted in colloquial speech. Nonetheless, an NP is interpreted as I-Focus if it is preceded by a *nun*-marked NP:

- (i) *Minji-nun wa.in cohahanta* (compare with (25b) above)
M.-Cont wine likes
‘As for *Minji*, it is wine that she likes.’
[*wa.in* = I-Focus]

Interestingly, however, I-Focus reading of the object *wa.in* is stronger in (i) than in (25b).

(26) **Condition on C-Focus in Korean** (*to be revised below and in Chapter 5*)

In order for a Focus NP to be interpreted as C-Focus, it must be *nun*-marked.

(27) **Condition on I-Focus in Korean** (*to be revised below and in Chapter 5*)

In order for a Focus NP to be interpreted as I-Focus, it must not be *nun*-marked.

Consider now the following:

(28) (Context: *what (kind of alcoholic drinks) does Minji like?*)

a. #*wa.in-un* Minji-*nun* cohahanta

wine-Cont M.-Cont likes

‘Speaking of wine, Minji likes it (e.g., but others don’t).’

[wine = Topic, Minji = C-Focus]

b. #*wa.in-ul* Minji-*nun* cohahanta

wine-Acc M.-Cont likes

‘Speaking of wine, Minji likes it (e.g., but others don’t).’

[wine = Topic, Minji = C-Focus]

The only difference between (25a,b) and (28a,b) is the structural position of the object *wa.in*, i.e., unlike in (25a,b), the object *wa.in* occurs in sentence-initial position in (28a,b). Nonetheless, this change in the position of the object *wa.in* is sufficient to change the interpretation it receives. As shown, the object *wa.in* in (28a,b) is now interpreted as Topic, not as Focus, as it occurs in sentence-initial position. Consequently, neither (28a) nor (28b) can serve as a felicitous answer to the question given. This seems to suggest that in Korean, not only the choice of the particle but also the position of the Focus NP plays a role in determining a focus interpretation. More specifically, an NP, X, must be preceded by another NP in the same clause in order for X to be interpreted as Focus. Finally, consider (29):

- (29) a. Minji-ka/nun wa.in-un cohahanta
 M.-Nom/Cont wine-Cont likes
 'Speaking of Minji, she likes wine (e.g., she doesn't like whiskey).'
 [wine = C-Focus]
- b. Minji-nun wa.in-ul cohahanta
 M.-Cont wine-Acc likes
 'As for Minji, it is wine that she likes.'
 [wine = I-Focus]
- c. Minji-ka wa.in-ul cohahanta
 M.-Nom wine-Acc likes
 'Minji likes wine.'
 [wine = neither Focus nor Topic]

(29a) shows that a *nun*-marked NP is interpreted as C-Focus if it is preceded by another NP in the clause. In other words, for C-Focus, it does not matter whether the preceding NP is Case-marked or *nun*-marked; what matters for C-Focus is the presence (or absence) of such a preceding NP. For I-focus, however, not only the presence of a preceding NP but also the particle attached to the preceding NP matters. (29b,c) show that the object *wa.in-ul* can be interpreted as I-Focus only when preceded by a *nun*-marked NP; if it is preceded by a Case-marked NP, it cannot be associated with either a topic or a focus reading as shown in (29c).

Based on the discussion so far, I revise the condition on C-Focus and I-Focus in (26) and (27), respectively, as follows:

(30) **Conditions on C-Focus in Korean** (*to be revised in Chapter 5*)

In order for an NP, X, to be interpreted as C-Focus,

- (i) X must be marked with *-nun*, and
- (ii) X must be preceded by another NP.

(31) **Conditions on I-Focus NP in Korean** (*to be revised in Chapter 5*)

In order for an NP, X, to be interpreted as I-Focus,

- (i) X must not be *nun*-marked, and
- (ii) X must be preceded by a *nun*-marked NP in the same clause.

Notice again that unlike I-Focus, C-Focus interpretation is ‘blind’ to the type of particle attached to the preceding NP. This seems to follow from our assumption that the particle *-nun* is in fact a marker of ‘Contrast’. Since the ‘contrastive’ interpretation is encoded in the particle ‘*-nun*’ itself, presence of a(nother) *nun*-marked NP is unnecessary for C-Focus.

4.5 Summary

Below is a summary of what we have discussed so far with respect to a topic or focus-related interpretation of NPs in transitive constructions in Korean. In the tables below, 1) it is irrelevant whether the NP in each cell is the subject or object, 2) NP on the left side precedes³¹ NP on the right side, and 3) NP_{Cont} refers to NPs marked with the Contrast particle ‘*-nun*’, and 4) NP without any specification refers to NPs marked with no particle³²:

³¹ The notion ‘precedence’ will be defined in terms of ‘c-command’ in chapter 5.

³² These NPs can be marked with a Case particle (in the syntax) but as mentioned in footnote 12, Case particles are not visible at the CI-interface because we assume that they are sent over only to the SM interface after Transfer. As a result, NPs with a Case particle are indistinguishable from those with a Case marker at the CI-interface.

(32) **Type I:**

	NP	NP
Interpretation	Neither Topic nor Focus	Neither Topic nor Focus

Type I shows that no NP in a transitive construction can be associated with either a topic or focus interpretation at the CI-interface if the construction contains no *nun*-marked NP. In this case, both NPs are interpreted only as a constituent that constitutes ‘Sentence-Focus’. We attributed this absence of a topic or focus interpretation of an NP to the absence of a *nun*-marked NP in the construction.

Type II and III below show the two different ways by which topichood of NPs is encoded in Korean. In either case, an NP must occur in sentence-initial position to be interpreted as Topic.

(33) **Type II:**

	NP _{Cont}	NP
Interpretation	C-Topic	I-Focus

Type II shows that contrastively-marked NPs (i.e., NPs with the Contrast marker ‘-*nun*’) are interpreted as C-Topic if they are preceded by no other NP in the construction and followed by an NP with no particle. It also shows that NPs without any marker are interpreted as I-Focus if they are preceded by a *nun*-marked NP.

(34) **Type III:**

	NP _{Cont} <i>or</i> NP	NP _{Cont}
Interpretation	P-Topic	C-Focus

Type III shows that not only *nun*-marked NPs but also NPs without any particle can serve as Topic if 1) they are preceded by no other NP in the construction, and 2) they are followed by a *nun*-marked Focus NP (i.e., C-Focus). Notice that Topic in Type III loses its contrastive meaning and it is instead interpreted as P-Topic even when it is marked with the Contrast particle ‘-*nun*’. We attributed the loss of contrastive meaning in this case to the presence of C-Focus (i.e., the presence of C-Focus ‘suppresses’ the contrastive meaning of C-Topic). Also shown in Type III is that *nun*-marked NPs are interpreted as C-Focus if they are preceded by another NP in the construction.

4.6 Particle -*nun* Revisited

In this section, we will (re-)examine the distributional and scopal properties of *nun*-marked NPs. I will show that 1) *nun*-marked NPs occupy a position higher than Case-marked NPs and that 2) a domain of contrast (DoC) is created by movement of *nun*-marked NPs. Also, I will show that one of the DoCs is cancelled when the clause contains two *nun*-marked NPs.

4.6.1 Distributional Properties of *nun*-marked NPs

Consider (35) below:

- (35) a. Minji-ka (palli) soselchayk-ul (ppalli) swumkiessta³³
 M.-Nom (quickly) novel-Acc (quickly) hid
 ‘Minji quickly hid (a/the) novel.’
 [soselchayk = neither Topic nor Focus]
- b. Minji-ka (*ppalli) soselchayk-un (ppalli) ilknunta
 M.-Nom (*quickly) novel-Cont (quickly) read
 ‘Speaking of Minji, she reads novels quickly (e.g., but newspapers slowly).’
 [soselchayk = C-Focus]

It has been widely assumed that adverbs such as *quickly* and *merrily* are predicate modifiers adjoined to VP (Jackendoff 1972, Thomason and Stalnaker 1973, Yanagida 1996, Katz 2000).³⁴ If this assumption is on track, what (35b) suggests is that *nun*-marked C-Focus such as *soselchayk-un* does not remain in-situ but always moves out of VP as it should not be preceded by the VP-adverb *ppalli* ‘quickly’, while Case-marked objects can remain in-situ.³⁵ The following examples show that even Case-marked objects must move (out of VP) in certain cases:

³³ Though very subtle, (35a) above can be interpreted in two different ways depending on the position of the adverb ‘*ppalli*’. The sentence can mean that the ‘event’ of Minji’s hiding the novel happened quickly when the adverb ‘*ppalli*’ precedes the object, while it can mean that the ‘manner’ of Minji’s hiding the novel was quick when the adverb follows the object. The first ‘event’ meaning is absent in (35b).

³⁴ The VP-adverbs above are often distinguished from the so-called S(entential)-adverbs such as *probably* and *luckily* in that the former occur structurally lower than the latter. This distributional difference between the two groups of adverbs has often been taken to account for, for example, the following data (from Katz 2000: 135):

- (i) It was *probably* true that Bill kissed Jill.
- (ii) *It was *quickly* true that Bill kissed Jill.

³⁵ Yanagida (1996) observes a similar pattern with respect to the structural distribution of *wa*-marked C-Focus in Japanese, which is known to be the Japanese counterpart of the Korean *nun*-marked C-Focus:

- (i). John-wa (hayaku) sono tegami-o (hayaku) yonda
 J.-WA (quickly) that letter-Acc (quickly) read

- (36) Q: Minji-nun (*ppalli) mwues-ul ppalli swumkiessni?
 M.-Cont (*quickly) what-Acc quickly hid
 ‘What did Minji quickly hide?’
 A: Minji-nun (*palli) soselchayk-ul ppalli swumkiessta.
 M.-Cont (*quickly) novel-Acc quickly hid
 [soselchayk = I-Focus]

Unlike in (35a), the Case-marked object *soselchayk* ‘novel’ in (36A) must not be preceded by the VP-adverb *ppalli* ‘quickly’ just like the *nun*-marked C-Focus NP in (35b). Compare now (36A) with (35a), repeated here as (37b) and (37a), respectively:

- (37) a. Minji-ka (palli) soselchayk-ul (ppalli) swumkiessta (=35a)
 M.-Nom (quickly) novel-Acc (quickly) hid
 ‘Minji quickly hid (a/the) novel.’
 [soselchayk = neither Topic nor Focus]
 b. Minji-nun (*palli) soselchayk-ul ppalli swumkiessta. (36A)
 M.-Cont (*quickly) novel-Acc quickly hid
 [soselchayk = I-Focus]

The only difference between (37a) and (37b) is the particle attached to the subject NP *Minji* (i.e., Case particle *-ka* vs. Contrast marker *-nun*). As stated in Section 4.4.1, Case-marked NPs are obligatorily interpreted as I-Focus only when preceded by a

‘John read the letter fast.’

[tegami = neither Topic nor Focus]

- (ii). John-wa (?*hayaku) sono tegami-wa (hayaku) yonda

J.-WA (?*quickly) this letter-WA (quickly) read

‘John read this letter fast (e.g., but he did not read that letter fast).’

[tegami = C-Focus]

(based on Yanagida 1996: 25, (14)/(15))

nun-marked NP. Therefore, the object *soseichayk-ul* in (37b) is interpreted as I-Focus, while the object in (37a) is not.

Compare now the distribution of each object in relation to the VP-adverb *ppalli* ‘quickly’. The ‘neither-Topic-nor-Focus’ object *soseichayk-ul* in (37a) can be either preceded or followed by the adverb, while the I-Focus object can only be followed by the adverb. This distributional difference between the two objects seems to suggest that Case-marked NPs move (out of VP) and (presumably) occupy the same place as *nun*-marked C-Focus NPs when they are associated with a focus interpretation (e.g., I-Focus in (36A)).

Continuing our discussion of distributional properties of *nun*-marked NPs, let us consider one more set of examples that show that they occupy a different position from Case-marked NPs. If we adopt the assumption that semantic differences are associated with structural differences as suggested in Chomsky (2001), the following data can serve as another piece of evidence to show that the structural position between *nun*-marked NPs and Case-marked NPs is different:

(38) A signboard in front of an escalator says:

- a. (**ppalli*) aywankyen-*un* (*ppalli*) anko thaseyyo
 (quickly) pet.dog-Cont (quickly) hold get.on
 ‘(If you have a pet dog,) you must quickly hold it (to take the escalator).’
- b. (*ppalli*) aywankyen-*ul* (*ppalli*) anko thaseyyo³⁶
 (quickly) pet.dog-Acc (quickly) hold get.on
 ‘(You must have a dog with you and) hold it quickly (to take the escalator).’

³⁶ As in (35a), there is a subtle difference in the interpretation of (38b), depending on the position of the adverb ‘*ppalli*’. The sentence can mean that the ‘event’ of holding a dog must happen quickly when the adverb ‘*ppalli*’ precedes the object, while it can mean that the ‘manner’ of holding a novel must be quick when the adverb follows the object.

4.6.2 Scopal Properties of *nun*-marked NPs

Based on the discussion in the previous section, let us assume that *nun*-marked C-Focus NPs move out of VP.³⁷ Then the question that immediately arises is why it is the case:

- (39) a. **Minji-ka* [*wa.in-ul* cohaha-ko/ciman *wiskhi-lul* silhehanta]
 M.-Nom wine-Acc like-and/but whiskey dislike
 ‘Minji likes wine but doesn’t like whiskey.’
 [wa.in, *wiskhi* = neither Topic nor Focus, part of Sentence-Focus]
- b. *Minji-ka* [*wa.in-un* cohaha-ko/ciman *wiskhi-nun* silhehanta]
 M.-Nom wine-Cont like-and/but whiskey-Cont dislike
 ‘Speaking of Minji, she likes wine but she doesn’t like whiskey.’
 [wa.in, *wiskhi* = C-Focus]
- c. **Minji-ka* [*wa.in-un* cohaha-ko/ciman] *Chelswu-ka* [*wiskhi-nun* silhehanta]
 M.-Nom wine-Cont like-and/but C.-Nom whiskey-Cont dislikes
 ‘Minji likes wine but Chelswu dislikes whiskey.’
- d. [*wa.in-un* *Minji-ka* cohaha-ko/ciman] [*wiskhi-nun* *Chelswu-ka* cohahanta]
 wine-Cont M.-Acc like-and/but whiskey-Cont C.-Nom likes
 ‘As for wine, it is Minji who likes it; as for whiskey, it is Chelswu who likes it.’
 [wa.in, *wiskhi* = C-Topic]

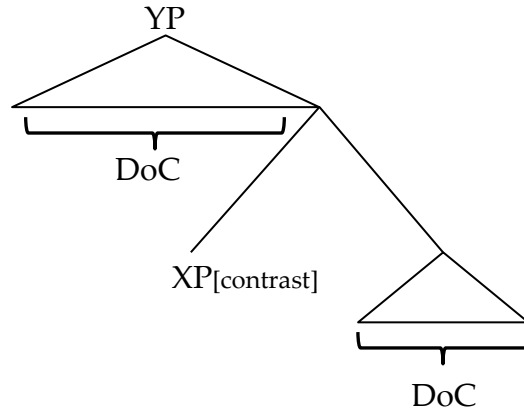
(39a) shows that the object *wa.in* (as well as the verb) cannot be contrasted with another alternative object such as *whiskey* if *wa.in* is Case-marked. This makes sense given our assumption that the (Case-marked) object *wa.in* in this case is not associated with either (C-)Topic or (C-)Focus because of absence of a *nun*-marked NP in the clause. If the object *wa.in* is marked with ‘-*nun*’ and interpreted as C-Focus, however, it can now be contrasted with another alternative object as shown

³⁷ I will assume that *nun*-marked C-Focus NPs move to the Outer-Spec of v. Chapter 5 discusses this issue in more detail.

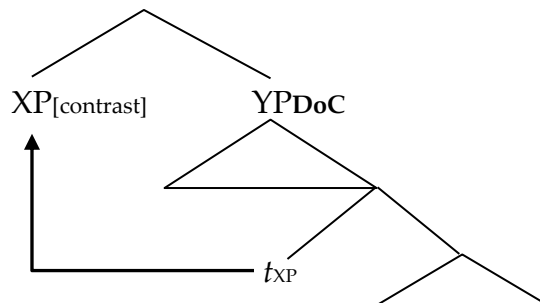
in (39b). Notice that there is some restriction on what elements in the clause can be contrasted with the object *wa.in*. (39c) shows that the subject *Minji*, which appears structurally ‘higher’ than the *nun*-marked object, cannot be contrasted with another alternative subject such as *Chelswu*. Once the subject *Minji* appears structurally ‘lower’ than the *nun*-marked object, however, it can now be contrasted with other alternative subject as shown in (39d). This seems to suggest that elements that can be contrasted (with alternative elements) are rendered contrastively by virtue of their structural position relative to a *nun*-marked NP.

Examining scrambling-related phenomena in Dutch, Neeleman, *et. al.* (2009: 21) claim that movement of a C-Topic or C-Focus “marks the material relevant to calculating the set of alternatives on which the contrast operates.” They call the relevant material the “domain of contrast (Doc).”

(40) a.

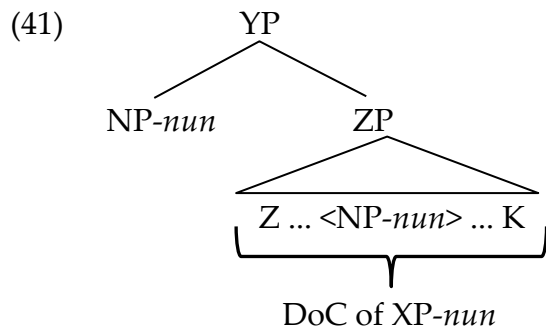


b.



(from Neeleman *et. al.* 2009: 21, (9))

Neeleman *et. al.* (2009: 21) claim that if a C-Topic or C-Focus remains in-situ, its DoC “need not be a constituent” as illustrated in (40a). In this case, as they argue, “the hearer must construe an appropriate domain of contrast based on contextual cues.” If a C-Topic or C-Focus moves, however, its discontinuous DoC turns into a constituent as shown in (40b). I do not adopt their claim about the discontinuous DoC but I follow and strengthen their claim in assuming that *nun*-marked NPs in Korean must create their DoC by movement. I further assume that a DoC created by (movement of) a *nun*-marked NP, X, includes elements that are contained in the sister of the NP (i.e., Z and K) as indicated below:



Let us now (re-)consider (39b,c,d), repeated here as (42a,b,c), respectively, to see how the notion of DoC can account for their (un)grammaticality (Note: the *nun*-marked NPs in (42) below are not within Doc as we defined it. Nevertheless, I put them within DoC because they are intrinsically (or lexically) ‘contrastive’ due to the Contrast particle ‘-*nun*’ attached to them).

- (42) a. Minji-ka [_{DoC} *wa.in-un* *cohaha*]-ko/ciman [*wiskhi-nun* *silhehanta*]
 M.-Nom wine-Cont like-and/but whiskey-Cont dislike
 ‘Speaking of Minji, she likes wine but she doesn’t like whiskey.’
 [*wa.in*, *wiskhi* = C-Focus]
- b. **Minji-ka* [_{DoC} *wa.in-un* *cohaha*]-ko/ciman *Chelswu-ka* [*wiskhi-nun* *silhehanta*]
 M.-Nom wine-Cont like-and/but C.-Nom whiskey-Cont dislikes
 ‘Minji likes wine but Chelswu dislikes whiskey.’
- c. [_{DoC} *wa.in-un* *Minji-ka* *cohaha*]-ko/ciman [*wiskhi-nun* *Chelswu-ka* *cohahanta*]
 wine-Cont M.-Acc like-and/but whiskey-Cont C.-Nom likes
 ‘As for wine, it is Minji who likes it; as for whiskey, it is Chelswu who likes it.’
 [*wa.in*, *wiskhi* = C-Topic]

(42a) is grammatical because what is contrasted in this case is the *nun*-marked object *wa.in* and the verb *cohaha*, both of which are within DoC. (42b) is ruled out because the subject *Minji-ka*, which is outside the DoC, is contrasted (with *Chelswu-ka*). Finally, (42c) shows that DoC of a *nun*-marked NP can be extended when the NP moves further. As a result, the subject *Minji-ka*, which was once outside DoC of *wa.in-un*, is now included in the extended DoC so that it can now be contrasted with other alternative subjects such as *Chelswu*.

The notion DoC can also account for unexpected interpretation of I-Focus NPs:

- (43) a. Minji-nun sakwa-lul cohahanta
 M.-Cont apple-Acc likes
 ‘Speaking of/As for Minji, it is apples that she likes.’
 [*sakwa* = I-Focus]
- b. [_{DoC} Minji-nun sakwa-lul cohaha]-ko Chelswu-nun lemon-ul cohahanta
 M.-Cont apple-Acc likes and C.-Cont lemon-Acc likes
 ‘As for Minji, it is apples that she likes and as for Chelswu, it is lemons that he likes.’

The object *sakwa* in (43a) is interpreted as I-Focus because as we defined it, it is preceded by a *nun*-marked NP (i.e., *Minji-nun*) and it is Case-marked. As discussed, however, I-Focus, by definition, does not bear a ‘contrastive’ meaning; if it did, it would not be interpreted as I-Focus but rather as C-Focus. Nonetheless, (43b) shows that the I-Focus object *sakwa* can be ‘contrasted’ with an alternative object such as *lemon*.

If we assume, as we do, that any NPs, *nun*-marked or Case-marked, can be contrasted by virtue of being included in DoC, we can account for the unexpected possibility of I-Focus being contrasted by arguing that it can be contrasted, not because it is ‘intrinsically’ (or lexically) contrastive but it happens to be included in DoC.

Consider now the following examples where NPs lose their contrastive meaning even though they are lexically contrastive:

- (44) a. *Minji-nun wa.in-ul sassta*
 M.-Cont wine-Acc bought
 ‘Speaking of Minji, she bought (a bottle of) wine.’
 [Minji = P-Topic]
 ‘As for Minji, she bought (a bottle of) wine (e.g., as for Chelswu, he bought).’
 [Minji = C-Topic]
- b. *Minji-nun wa.in-un sassta*
 M.-Cont wine-Cont bought
 ‘Speaking of Minji, she bought (a bottle of) wine (e.g., but she didn’t).’
 [Minji = P-Topic *only*]

The interpretation of the Topic *Minji* in (44a) is ambiguous between P-Topic and C-Topic. The interpretation of the Topic *Minji* in (44b), however, is not ambiguous; it is interpreted only as P-Topic despite the fact that it is marked with the same

(Contrast) particle ‘*nun*’ and occurs in the same sentence-initial position as *Minji* in (44a). The question that arises is why this is so.

To account for the absence of ambiguity in (44b), I propose the following:

- (45) Cancellation of DoC (*to be revised in Chapter 5*)

DoC of a *nun*-marked NP, X, is cancelled if there is an intervening (head of) Y of the same kind between X and its copy. A *nun*-marked NP whose DoC is cancelled cannot be interpreted contrastively.³⁸

Consider (44b) again, repeated here as (46):

- (46) [DoC2 *Minji-nun* [DoC1 *wa.in-un* <*Minji-nun*> <*wa.in-nun*> *sassta*]]
-

‘Speaking of *Minji*, she bought (a bottle of) wine (e.g., but she didn’t buy beer).’
[*Minji* = P-Topic *only*]

As shown in (46), the *nun*-marked object *wa.in-un* intervenes between the *nun*-marked *Minji-nun* and its copy. According to (45), DoC of *Minji-nun* is cancelled and the subject *Minji-nun* loses its contrastive meaning.

³⁸ I will not discuss this in detail but I still would like to briefly point out that effects similar to our ‘Cancellation of Doc’ have been proposed in various (different) ways in the literature. One such proposal is the ‘defective intervention effect’ in Chomsky (2000, 2001), where he argues that an intervening β between α and γ blocks matching between α and γ if β also matches with α . The other is the so-called ‘Negative Concord (NC)’, as Samuel Epstein points out (p.c.), where negation is semantically interpreted only once despite being expressed by more than one element in the clause (e.g., John didn’t have *no* smart phone). See Zeijlstra (2004) and Haegeman & Lohndal (2010), among others, for a detailed discussion of NC.

4.6.3 Summary

In the previous two sections (Section 4.6.1 and 4.6.2), I showed that *nun*-marked NPs in Korean occupy a higher position in the clause than Case-marked NPs. We attributed this higher position of *nun*-marked NPs to the requirement that they create a domain of contrast (DoC), based on which elements in a clause that can be contrasted is calculated. I also showed that I-Focus NPs, which are not lexically contrastive, can be contrasted if they are included in DoC created by a *nun*-marked NP. Finally, I showed that *nun*-marked NPs can lose the contrastive meaning if their DoC is cancelled by the presence of an intervening *nun*-marked NP.

In Chapter 5, I will revise and reformulate the (descriptive) assumptions I made in this chapter and present a structural analysis of the constructions described here.

Chapter 5

Topic and Focus in Korean: Structural Analysis

5.1 Introduction

Below is a summary of the distributional and morphological properties of NPs with respect to their topic or focus interpretation we discussed in the previous chapter (in each formulation in (1) below, 1) it is irrelevant whether the NP is the subject or object, 2) NP1 occurs structurally higher than NP2, and 3) NP_{CASE} and NP_{Cont} should respectively read as an NP marked with a Case particle (e.g., Nominative or Accusative) and an NP marked with the Contrast particle ‘-nun’:

(1) a. [NP1_{CASE} NP2_{CASE}]

Neither NP1 nor NP2 is associated with Topic or Focus

b. [NP1_{CASE} or NP1_{Cont} NP2_{Cont}]

NP1 is interpreted as P-Topic, while NP2 is interpreted as C-Focus

c. [NP1_{Cont} NP2_{CASE}]

NP1 is interpreted as P- or C-Topic, while NP2 is interpreted as I-Focus

In this chapter, I will discuss the domain that is transferred to each of the interfaces (i.e., SM and CI) once a phase is completed and I will hypothesize that VP is the target domain for Transfer in the vP-phase (Chomsky 2000 *et. seq.*), while it is the entire CP that is transferred in the matrix CP-phase (Obata 2010). In Section 5.3, I

will revisit and reformulate the essential assumptions that we discussed in Chapter 4. Finally in Section 5.4, I will present a structural analysis of each of the constructions in (1) based on these assumptions.

5.2 Domain for Transfer (DoT)

Following Chomsky (2000 *et. seq.*), let us assume the following:

- (2) a. Phases are CP and vP.
- b. Structures constructed in the syntax are sent over to each interface phase-by phase by iterative application of the operation Transfer.^{1,2}
- c. Once transferred for interpretation, the structure is no longer available to further operations in the syntax.

As Chomsky (2008) claims, a phase-based cyclic Transfer of the syntactic elements already constructed to the interfaces reduces computational burden because such a cyclic Transfer operation enables the syntax to periodically forget derivational information. Therefore, a system equipped with a cyclic Transfer is in better conformance with the Strong Minimalist Thesis (i.e., the assumption of computationally efficient design for satisfaction of interface conditions) than a system without such an operation (see also section 2.3, chapter 2).

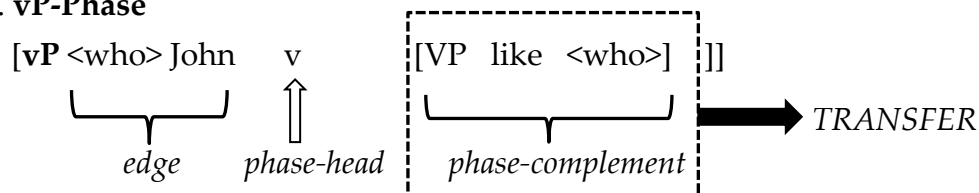
¹ Chomsky (2007, 2008, 2013) argue that with the exception of EM, all operations including Transfer are restricted to or triggered by the phase head.

² See Epstein, *et al.*, (1998), where the authors argue that the operation Transfer occurs every time Merge takes place. See also Grohmann (2009) for a detailed discussion of different approaches to the unit for Transfer.

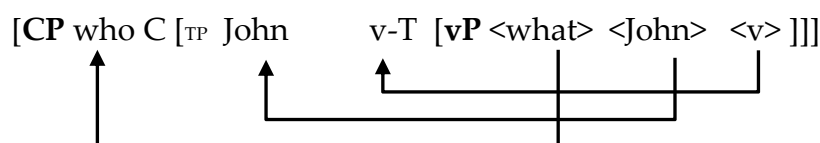
Let us now focus on the unit of domain that becomes a target for the operation Transfer once a phase is completed. Consider (3b,c) where lower copies of the displaced elements are indicated by <angled brackets>³:

(3) a. Who does John like? ⁴

b. **vP-Phase**



c. **CP-Phase**



Once all other operations such as AGREE and IM have been carried out in the vP-phase in (3b), the operation Transfer applies to send the structure constructed over to each interface (i.e., SM- and CI-interface).⁵ Now the question is exactly how much of the structure in vP becomes the target for Transfer.

³ According to the 'copy theory of movement' (Chomsky 1993, 1995), a moved element leaves behind a copy of itself, rather than a (co-indexed) trace. The copy theory of movement complies with an independently motivated condition called the 'Inclusiveness Condition' (Chomsky 1995, 2000a) which requires that no new features such as a trace or an index be introduced by the syntax.

⁴ For expository purposes, the following operations are omitted in the derivations in (3a,b):

- (i) insertion of the auxiliary verb 'do' to T
- (ii) movement of 'do' from T to C, and
- (iii) movement of the verb 'like' from V to v.

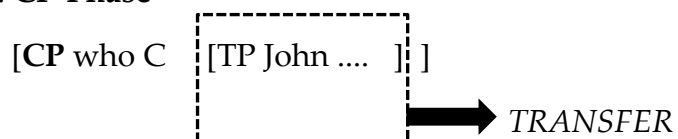
⁵ Transfer to the SM-interface is often called 'Spell-Out' to distinguish it from the other route of Transfer to the CI-interface.

Chomsky (2000 *et. seq.*) argues that the target domain for Transfer (henceforth, DoT) should not be the entire phase (e.g., the entire vP in (3b)) because certain elements in a phase must be left behind after Transfer, so that they can be available to further computations at the next higher phase. In the vP-domain in (3b), for example, the subject *John* in Spec-v, the displaced object *who* in Outer-Spec-v, and the phase head *v* are syntactic objects that must be left behind so that they are available to further operations at the next higher CP-phase as illustrated in (3c). Based on this line of logic, Chomsky claims that the target domain for each application of Transfer is not the entire phase but only the complement domain of a phase head (e.g., VP in (3b)); elements in what he calls the ‘edge’ (i.e., <who> and *John* in Outer-Spec-v and Spec-v, respectively, in (3b)) and the phase head itself are left behind.

Assuming Chomsky’s analysis of the DoT in the vP-phase, let us now apply the same to the following matrix CP-phase (only the relevant structure is represented in (4b) below):

(4) a. Who do you like?

b. **CP-Phase**

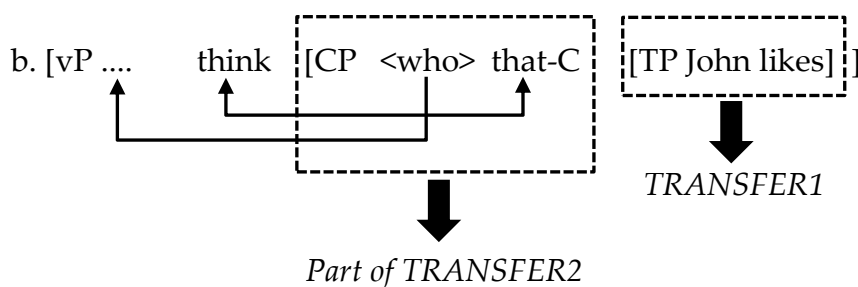


In (4b), TP is the complement of the phase-head C and hence it becomes the target for Transfer immediately after the phase CP is completed. The displaced object *who* in the edge position (i.e., in Spec-C) and the phase head C itself are left behind. A question that immediately arises at this point is ‘How then can *who* and C be sent to the interfaces for interpretation?’ Since there is no higher phase where the

operation Transfer can take place, both *who* and C in (4b) can no longer be a target domain for Transfer. If the two are not transferred to the interfaces, they cannot receive interpretation; if they cannot receive interpretation, the sentence '*who do you like*' in (4a) cannot be interpreted as intended.

Consider now (5), where unlike in (4b), leaving behind <who> and C does not raise the problem just discussed (only the relevant structures are represented in (5b)):

(5) a. Who do you think that John likes?



Leaving behind <who> and C in the embedded CP is not problematic in (5b) because 1) they both must be available to further operations⁶ in the next higher phase, vP, and 2) they can be transferred to the interfaces for interpretation once the higher vP-phase is completed. As shown, however, there is no such next higher phase available in (4b); therefore, the problem of Transfer of <who> and C still remains in this case.

⁶ As indicated in (5b), one such further operation is movement of <who> in the specifier position of the embedded C to Outer-Spec of v in the matrix clause (and eventually to the specifier position of the matrix C). Other operations to which elements in the lower phase must be available include the establishment of selectional relation between the matrix verb 'think' and the (lower) C, i.e., the lower C must be left available to the matrix verb 'think', so that the verb's selection for a 'declarative' clause can be established.

To tackle the problem of Transfer of the edge and the phase head in the matrix CP-phase as in (4b), I follow Obata (2010) in assuming that in the matrix CP, all the elements (i.e., the edge and the phase head as well as the phase-head complement) become the target domain for Transfer; otherwise, as Obata suggests, there seems to be no way to send the edge and the phase head to the interfaces because they are never included in the complement domain of any phase head complement.

To summarize, I follow Chomsky (2000 *et. seq.*) in assuming that DoT in the vP-phase is VP (and DoT in the embedded CP is TP). For the matrix CP-phase, however, I follow Obata (2010) just discussed in assuming that along with the complement of the phase head, the phase head C and the edge as well become the target for Transfer.

5.3 Assumptions

In this section I will revisit and reformulate the assumptions about Topic and Focus advanced in Chapter 4. Our first assumption to (re-)consider concerns the domain where calculation of Topic and Focus takes place.

(6) **Assumption I:**

Upon each Transfer, calculation of Topic and Focus is carried out at the CI-interface on NPs contained in each domain transferred (DoT) to the CI-interface.

I also assume that the target NP for calculation of Topic and Focus is the head (of a chain). In other words, I assume that the copy/copies of a displaced NP are not

visible for the ‘purposes of Topic or Focus calculation’ at the CI-interface.^{7,8} Consider now (7) to see exactly how the calculation of Topic and Focus is carried out at the CI-interface:

- (7) a. [CP [_{TP} NP1 [_{VP} [VP NP2]]]]
-
- b. [CP [_{TP} NP1 [NP2 _{VP} [VP <NP2>]]]]
-

In (7a), there are two independent DoTs for calculation of Topic or Focus: one is VP where the target NP for the calculation of Topic and Focus is NP2, and the other is CP where the target NP for the calculation of Topic and Focus is NP1. In (7b), however, there is no target NP for the calculation of Topic and Focus in VP, while the next DoT, CP, contains two target NPs (i.e., NP1 and (the head of) NP2) for the calculation of Topic and Focus.

Our second assumption concerns the obligatory presence of a *nun*-marked NP in DoT for NPs in the same DoT to be able to be associated with Topic or Focus .

⁷ Invisibility of copies of a moved element has been proposed for other operations. Chomsky (2001), for example, claims that “only the head of an A-chain blocks matching under the Minimal Link Condition.” Invisibility of copies with respect to labelling, see Chomsky (2013, 2014).

⁸ I do not claim that copies of a moved element are invariably invisible to ‘all’ operations; if they were, there would be no way, for example, for a moved element to be associated with its copy to which a theta-role is assigned. As will be discussed in Assumption VII below, I assume that copies of a moved element are visible for the purpose of formulating a domain of contrast.

(8) **Assumption II:**

Calculation of Topic or Focus in a DoT is possible at the CI-interface only if the DoT contains a *nun*-marked NP.

Put differently, Assumption II states that no NP in a DOT can be associated with a topic or focus interpretation at the CI-interface if the DOT does not contain a *nun*-marked NP within it.⁹

As discussed in Chapter 4, Assumption II is supported by the following data (throughout each target NP for calculation of Topic and Focus is indicated in ***bold italics***):

- (9) a. **[CP [TP *Minji-ka* [VP [***VP*** *wa.in-ul* sassta]]]]**
 M.-Nom wine-Acc bought
 ‘Minji bought (a bottle of) wine.’
 [Minji, wa.in = neither Topic nor Focus]

- b. **[CP [TP *Minji-ka* [VP *wa.in-un* [***VP*** <wa.in-un> sassta]]]]**
 M.-Nom wine-Cont bought
 ‘Speaking of Minji, she bought (a bottle of) wine (e.g., but she didn’t buy beer).’
 [Minji = Topic, wa.in = Focus]

⁹ However, Assumption II does not exclude the possibility of an NP being associated with a topic or focus interpretation later at other interfaces where e.g., pragmatic (or discourse-related) interpretations occur. As discussed in Chapter 4 and will be pointed out in Chapter 6, pragmatic factors can either ‘suppress’ the contrastive meaning in C-Topics or ‘bring about’ an I-Focus interpretation.

Neither the subject *Minji-ka* nor the object *wa.in-ul* in (9a) can be associated with a topic or focus interpretation at the CI-interface because in (9a) each DoT (i.e., CP and VP) contains no *nun*-marked NP. In (9b), however, the subject *Minji-ka* and the object *wa.in-un*, both of which belong to the same DoT (i.e., DoT2), can be associated with a Topic or Focus interpretation at the CI-interface due to the presence of a *nun*-marked NP in DoT2.

If a DoC does contain a *nun*-marked NP so that the NPs in the DoT indeed can be calculated for a topic or a focus interpretation at the CI-interface, I assume that the choice between the two interpretations is determined by the following structural properties of NPs:

(10) **Assumption III:**

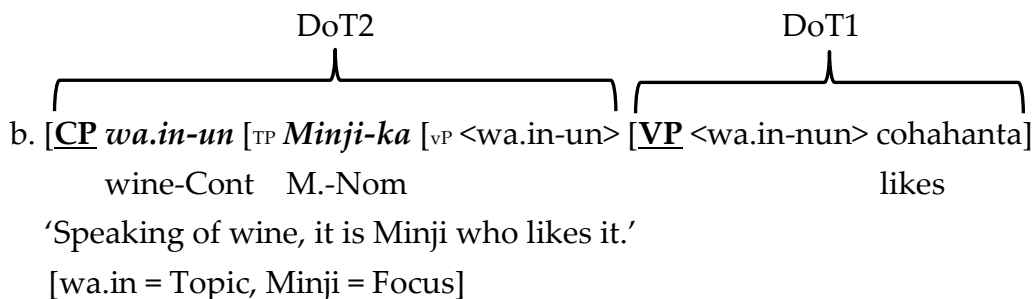
- (i) if an NP, X, is c-commanded by no other NP in the same DoT, X is interpreted as Topic.
- (ii) if X is c-commanded by another NP in the same DoT, X is interpreted as Focus.

(11) [_{DoT} NP1 [NP2]], where one of the two NPs is *nun*-marked.

According to Assumption III in (10), NP1 in (11) is interpreted as Topic as it is c-commanded by no other NP in the given DoT, while NP2 is interpreted as Focus as it is c-commanded by NP1. The following data support the analysis:

- (12) a.
- M.-Nom wine-Cont likes
- ‘Speaking of Minji, she likes wine (e.g., but she didn’t like).’

[Minji = Topic, wa.in = Focus]



The NP that is interpreted as Topic in (12a) and (12b) are the subject *Minji-ka* and the object *wa.in-un*, respectively, as they are the NPs that are not c-commanded by any other NP in the specified DoT. In contrast, the object *wa.in-un* in (12a) and the subject *Minji-ka* in (12b) are interpreted as Focus because both are c-commanded by another NP in their DoT.

In Chapter 4, we divided the interpretation of Topic into two subtypes, i.e., C-Topic and P-Topic for Topic, and divided Focus into C-Focus and I-Focus. For this distinction between C- and P-Topic and between C- and I-Focus, I make the following morphology-driven assumption:

(13) **Assumption IV:**

- (i) Topic NPs are interpreted as C-Topic if they are marked with *-nun*; otherwise, they are interpreted as P-Topic.
- (ii) Focus NPs are interpreted as C-Focus if they are marked with *-nun*; otherwise, they are interpreted as I-Focus.

Assumption IV states that the meaning of contrast of (Topic or Focus) NPs in Korean is encoded, not by means of syntax but by morphology, i.e., by the Contrast

particle ‘-*nun*’. The following data, where the relevant DoTs are indicated by underlining, support the assumption:

- (14) a. [CP [_{TP} *Minji-nun* [_{VP} *wa.in-ul* [VP <wa.in-ul> cohahanta]]]]
 M.-Cont wine-Acc likes
 ‘As for Minji, it is wine that she likes (e.g., as for Chelswu, it is).’
 [Minji = C-Topic, wa.in = I-Focus]
- b. [CP [_{TP} *Minji-ka* [_{VP} *wa.in-un* [VP <wa.in-un> cohahanta]]]]
 M.-Nom wine-Cont likes
 ‘Speaking of Minji, she likes wine (e.g., but she doesn’t like ...).’
 [Minji = P-Topic, wa.in = C-Focus]

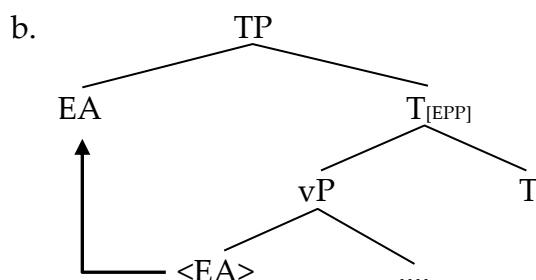
Both *wa.in-ul* in (14a) and *wa.in-un* in (14b) are interpreted as Focus because each NP is c-commanded by another NP within their DoT (**Assumption III(ii)**), but only the latter is interpreted as C-Focus due to this NP bearing the particle ‘-(*n*)un’ attached to it (**Assumption IV(ii)**); the former is interpreted as I-Focus due to lack of the Contrast particle. The same phenomenon is observed between the Topic NPs in (14a) and (14b): only the *nun*-marked Topic *Minji-nun* in (14a) is interpreted as C-Topic, *Minji-ka* in (14b) being interpreted as P-Topic.

The following two assumptions concern the EPP-feature on T and the optional assignment of an EPP-feature to each phase head (i.e., C and v). Following Chomsky (1995 *et. seq.*), I first assume that the finite T in Korean obligatorily bears an EPP-feature,^{10,11} which is satisfied by (overt) movement of the external argument (EA) to Spec-T as shown in (15b):

¹⁰ It is controversial whether Korean has non-finite clauses. See Kim, D.-S. and Kim, Y.-H. (2003), among others, for related discussion.

(15) a. **Assumption V:**

Finite T in Korean obligatorily bears an EPP-feature.



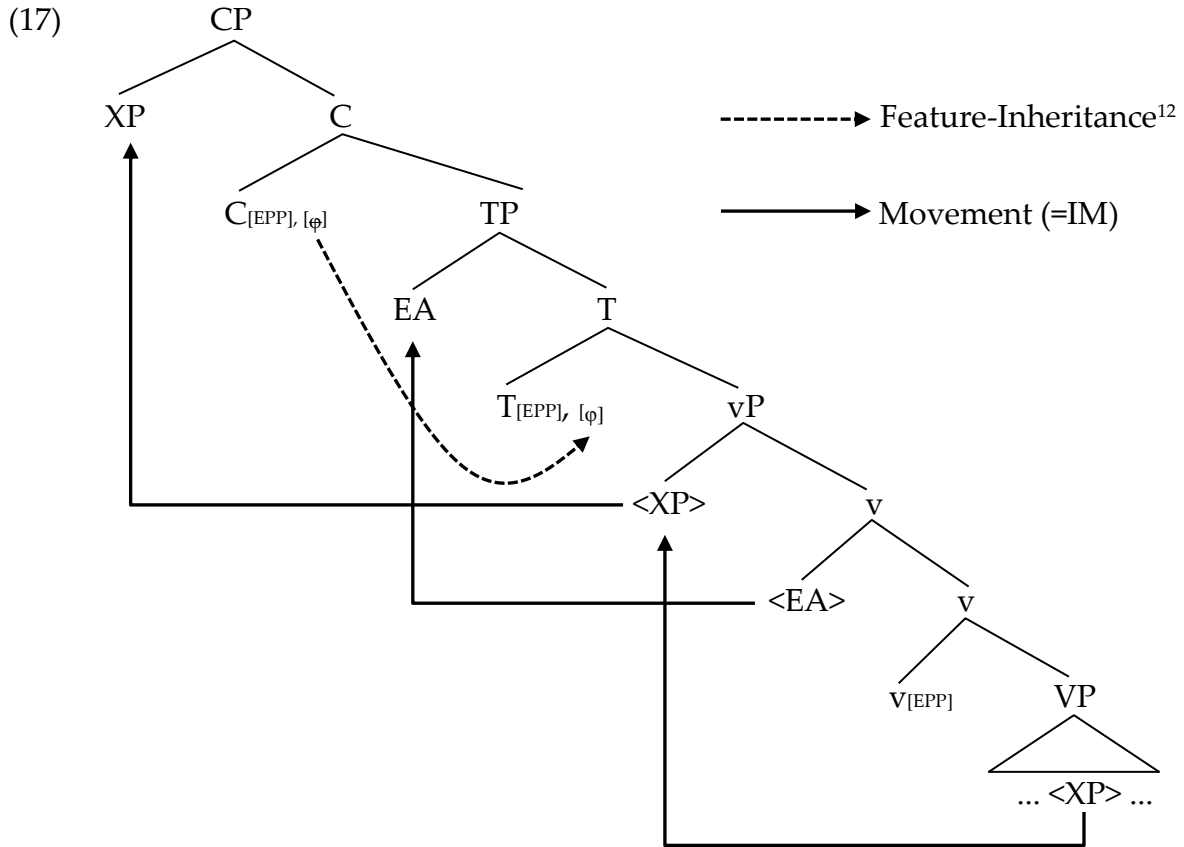
Following and extending Chomsky (2001), I also assume that each phase head (i.e., C and v) can be optionally assigned an EPP-feature:

(16) **Assumption VI:**

An EPP-feature can be optionally assigned to each phase head (i.e., C or v).

If both v and C are assigned an EPP-feature, each EPP-feature is satisfied by (overt) movement of XP to Outer-Spec of v and its subsequent movement to Spec-C as illustrated in (17):

¹¹ Chomsky's (2014) labeling theory attributes the EPP effect on (the finite) T to the parametric difference in agreement. That is, T in languages with rich agreement such as Italian can serve as a label on its own, while T in languages with weak agreement such as English cannot. Therefore, Spec-T in English-type languages must be overtly filled for labeling purposes. If this claim is on track, it can be argued that Spec-T in Korean must also be overtly filled for labeling purposes because Korean is (arguably) one of the weak agreement languages. For agreement in Korean, see Pak (2006).



Our final assumption concerns the Domain of Contrast (DoC) of *nun*-marked NPs:

(18) **Assumption VII:**

- (i) A contrastively marked NP (i.e., a *nun*-marked NP), X, must have a DoC.
- (ii) X must c-command its copy/copies in order for X to create a DoC.
- (iii) DoC of X is cancelled if there is an intervening (head of) Y of the same kind (i.e., a *nun*-marked NP) in X's DoT between X and its copy/copies.
- (iv) X cannot be interpreted contrastively if its DoC is cancelled.

¹² I will not discuss this in detail but there arise several issues with respect to movement of EA to Spec-T in (17). One of the issues concerns the question of how an AGREE relation can be established between ϕ -features on T and those of EA, given the fact that ϕ -features of XP intervene between the two. For this issue, see Obata (2010) where the author argues that XP in Outer-Spec of v does not bear ϕ -features.

and its copy. Consequently, *Minji-nun* loses its contrastive meaning and is interpreted as P-Topic.

5.4 Structural Analysis

This section provides a detailed structural analysis of each of the constructions presented in (1), repeated here as (21):

(21) a. **[NP1 NP2]**

Neither NP1 nor NP2 is associated with Topic or Focus

b. **[NP1_{Cont} or NP1 NP2_{Cont}]**

NP1 is interpreted as P-Topic, while NP2 is interpreted as C-Focus

c. **[NP1_{Cont} NP2]**

NP1 is interpreted as P-/C-Topic, while NP2 is interpreted as I-Focus

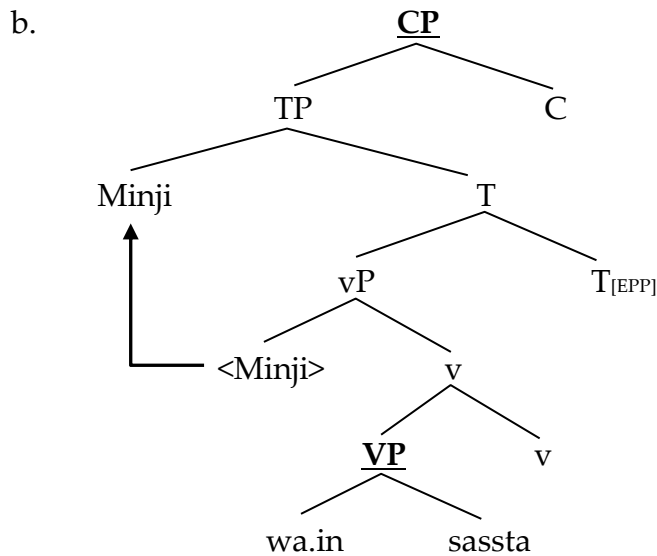
It should be noted from the outset that NPs marked with no particle in (21) can be ones marked with a Case particle (in the syntax). However, Case-related information of an NP will not be indicated in the tree diagrams below as we assume that the information has already been taken away by Transfer (or Spell-Out, more specifically) and sent over to the SM interface (see also footnote 12 in Chapter 4).

5.4.1 [NP1 NP2]

Consider (22a) and its derivation in (22b):

- (22) a. *Minji-ka wa.in-ul sassta*
M.-Nom wine-Acc bought

'Minji bought (a bottle of) wine.'
 [Minji/wa.in = neither Topic nor Focus]



Since neither of the two DoTs (i.e., CP or VP) in (22b) contains a *nun*-marked NP, neither the subject *Minji* nor the object *wa.in* can be associated with a topic or focus interpretation at the CI-interface. As discussed in Chapter 4, each NP in this case is interpreted as a constituent that constitutes 'Sentence-Focus'.¹³

Let us now reconsider the seemingly plausible argument we discussed in Chapter 4. The argument was that when neither of the NPs are contrastively marked as in (22), the NP that is mostly embedded in the structure (i.e., the object *wa.in* in (22)) receives a focus interpretation. If this line of argument were on track, it would be expected that (22a) can serve as a felicitous answer to the following question. The pragmatic oddity of (23A) indicates otherwise, however:

¹³ It needs to be accounted for, however, how the interpretation of 'Sentence-Focus' is assigned and where in the grammar.

- (23) Q: What did Minji buy?
A: #Minji-ka wa.in-ul sassta.

5.4.2 [NP1 NP2_{Cont}]

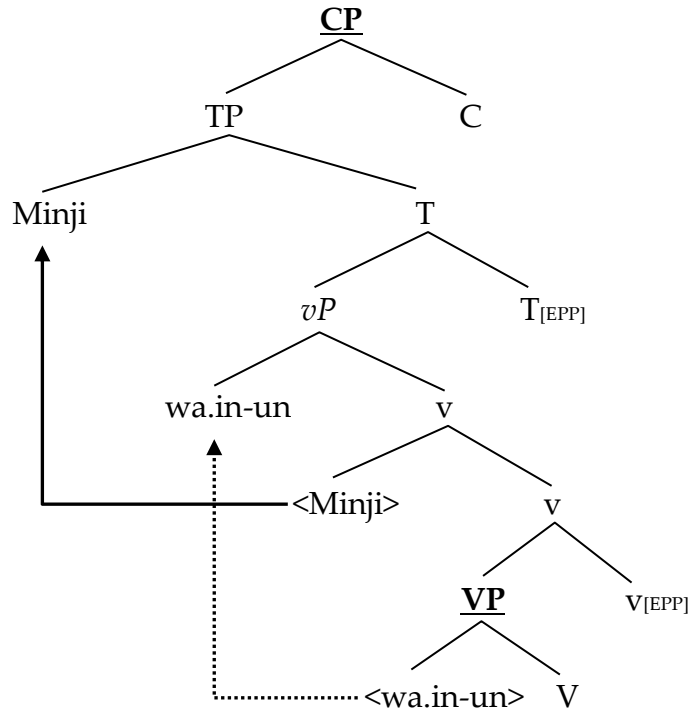
The construction [NP1 NP2_{Cont}] is divided further into two different subtypes, depending on whether NP1 is the subject or the object. We first discuss the derivation where NP1 is the subject and then discuss the other derivation where NP1 is the object.

5.4.2.1 [Subject Object_{Cont}]

Consider (24a) and its derivation in (24b), where DoT and DoC are indicated by underlining and italics:

- (24) a. Minji-ka wa.in-un cohahanta
M.-Nom wine-Cont likes
'Speaking of Minji, she likes wine (e.g., but she doesn't like ...).'
[Minji = P-Topic, wine = C-Focus]

b.



Two movements are involved in (24b): one is movement of the subject *Minji* to Spec-T to satisfy the EPP-feature on T and the other is movement of the object *wa.in-un* to satisfy the optionally assigned EPP-feature on v.¹⁴ The relevant DoT for calculation of Topic and Focus at the CI-interface is CP, where the head of each NP is located, and the DoC created by movement of the contrastively marked object *wa.in-un* is *vP*:

¹⁴ Though not indicated (for simplicity), it is assumed in (24b) that (uninterpretable) ϕ -features on C and v are inherited by T and V, respectively. After feature-inheritance, (uninterpretable) ϕ -features on T undergo AGREE with (interpretable) ϕ -features on the subject *Minji*, while ϕ -features on V undergo AGREE with ϕ -features on the object *wa.in*. Consequently, (uninterpretable) ϕ -features on T and V are valued.

(25) [CP [_{TP} *Minji* [_{vP=Doc} *wa.in-un* <*Minji*> <*wa.in-un*>]]]

Since CP contains a *nun*-marked NP, calculation of Topic and Focus is carried out at the CI-interface based on the structural position of each NP. The subject *Minji* in Spec-T is interpreted as Topic because it is not c-commanded by any other NP within CP (**Assumption III(i)**). It is further interpreted as P-Topic since it is not marked with ‘-*nun*’ (**Assumption IV**). The object *wa.in* is interpreted as Focus because it is c-commanded by the subject *Minji* in CP (**Assumption III(ii)**) and it is further interpreted as C-Topic due to the Contrast marker ‘-*nun*’ attached to it (**Assumption IV**).

As indicated in (24b), the subject *Minji* is outside DoC created by the *nun*-marked object *wa.in*. This accounts for the (un)grammaticality of (26):

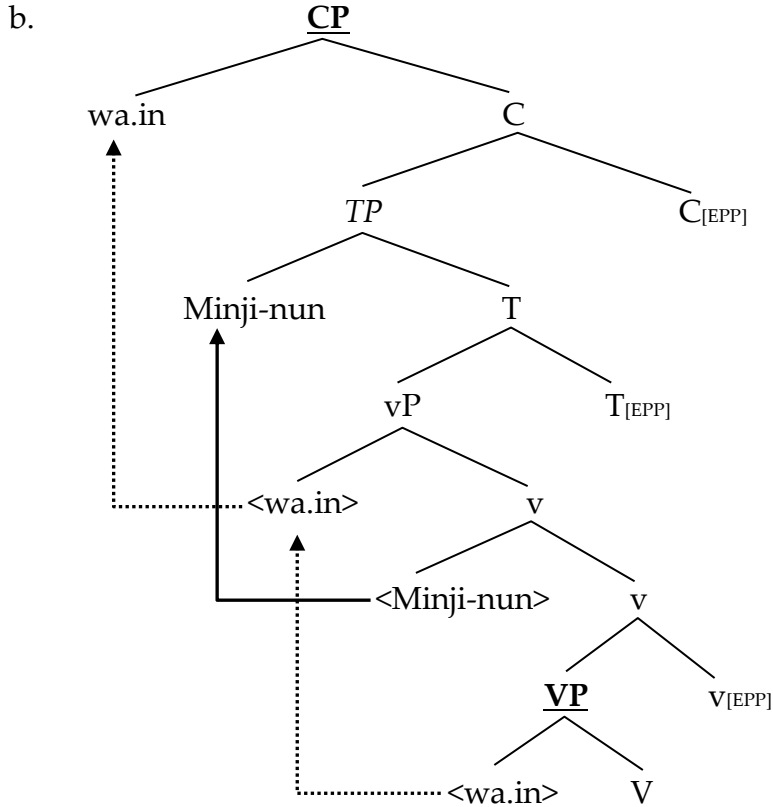
- (26) a. *Minji-ka* [_{vP} *wa.in-un* *cohahaciman* [_{vP} *maykcwu-nun* *silhehanta*]
M.-Nom wine-Cont likes.but beer-Cont dislikes
‘*Minji* likes wine but (she) doesn’t like beer.’
b. *[_{TP} *Minji-ka* [_{vP} *wa.in-un* *cohahajiman* [_{TP} *Chelswu-ka* [_{vP} *maykcwu-nun* ...]
M.-Nom wine-Cont likes.but C.-Nom beer-Cont
‘*Minji* likes wine but *Chelswu* likes ...’

(26b) shows that the subject *Minji-ka*, which is outside DoC created by movement of the *nun*-marked object *wa.in*, cannot be contrasted.

5.4.2.2 [Object Subject_{Cont}]

Consider (27a) and its derivation in (27b):

- (27) a. *wa.in-ul Minji-nun cohahanta*
 wine-Acc M.-Cont likes
 ‘Speaking of wine, Minji likes it (e.g., but Chelswu doesn’t).’
 [*wa.in* = P-Topic, *Minji* = C-Focus]



The relevant DoT for Topic and Focus calculation in (27b) is CP, where head of both NPs are located. The object *wa.in* is now interpreted as Topic because it is c-commanded by no other NP within CP (**Assumption III(i)**). It is further interpreted as P-Topic due to lack of the Contrast particle ‘-*nun*’ (**Assumption IV**). The subject *Minji* is interpreted as Focus as it is c-commanded by the object *wa.in* within CP (**Assumption III(ii)**). It is further interpreted as C-Focus as it is marked with ‘-*nun*’ (**Assumption IV**).

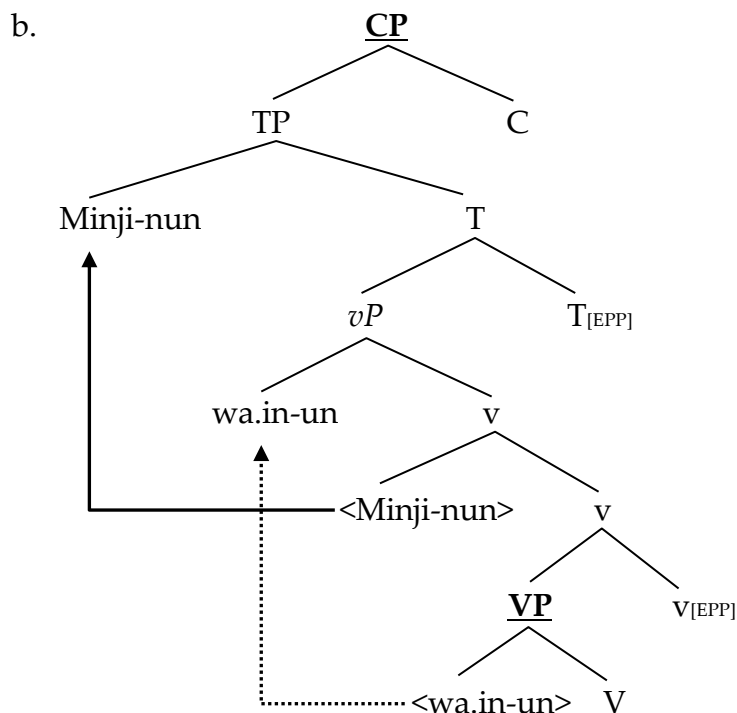
5.4.3 [NP1_{Cont} NP2_{Cont}]

As with [NP1_{CASE} NP2_{Cont}] in the previous section, the construction [NP1_{Cont} NP2_{Cont}] is also divided into two different subtypes, depending on whether NP1 is the subject or the object. We first discuss the derivation where NP1 is the subject and then discuss the other derivation where NP1 is the object.

5.4.3.1 [Subject_{Cont} Object_{Cont}]

Consider (28a) and its derivation in (28b):

- (28) a. Minji-nun wa.in-un cohahanta
 M.-Cont wine-Cont likes
 ‘Speaking of Minji, she likes wine (e.g., but she doesn’t like ...).’
 [Minji = P-Topic]

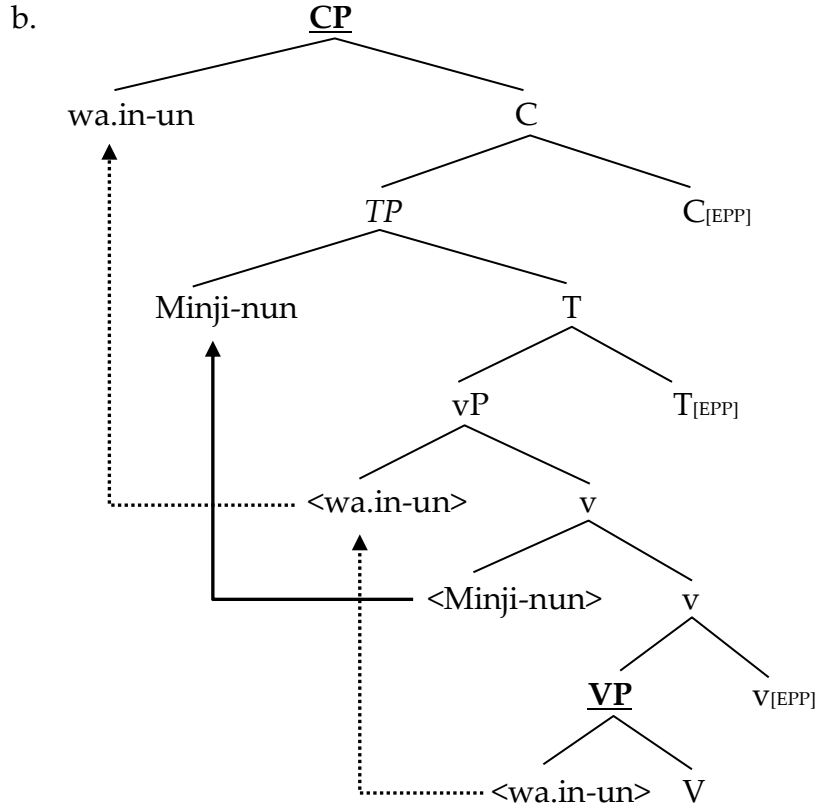


The relevant DoT for calculation of Topic and Focus in (28b) is CP, where (the head of) both NPs are located. The object *wa.in-un* is interpreted as Focus because it is c-commanded by *Minji-nun* within CP (**Assumption III(ii)**). It is further interpreted as C-Focus as it is marked with the Contrast particle ‘*-nun*’ (**Assumption IV(i)**). The subject *Minji-nun* is interpreted as Topic because it is c-commanded by no other NP within CP (**Assumption III(i)**). Notice, however, that the subject *Minji-nun* is interpreted (only) as P-Topic but not as C-Topic, despite the fact that it is marked with the Contrast particle ‘*-nun*’. We attributed this unexpected loss of a contrastive meaning in contrastively marked Topics in general to the presence of (the head of) an intervening *nun*-marked. So construed, DoC of the subject *Minji-nun* in Spec-T is invalidated due to the presence of (the head of) the *nun*-marked NP *wa.in-un* within DoC of *Minji-nun*, which in turn results in the loss of the contrastive meaning inherent to the C-Topic *Minji-nun*.

5.4.3.2 [ObjectCont SubjectCont]

If the object *wa.in-un* in (28b) further moves to Spec-C to satisfy the optionally assigned EPP-feature of C, the following structure is generated:

- (29) a. wa.in-un Minji-nun <wa.in-un> <Minji-nun> cohahanta
 wine-Cont M.-Cont likes
 'Speaking of wine, Minji likes it (e.g., but Chelswu doesn't like it).'
 [wa.in = P-Topic, Minji = C-Focus]



The relevant DoT for calculation of Topic and Focus in (29b) is CP, where (the head) of both NPs are located. Between the two NPs, the object *wa.in-un* in Spec-C is interpreted as Topic as it is c-commanded by no other NP (**Assumption III(i)**), while the subject *Minji-nun* is interpreted as Focus because it is c-commanded by the object *wa.in-un* (**Assumption III(ii)**). The subject *Minji-nun* is further interpreted as C-Focus because 1) it is marked with the Contrast particle ‘-nun’ (**Assumption IV(i)**), and 2) there is no intervening NP of the same kind between the head *Minji-nun* and its copy (**Assumption VII(iii)**). The object *wa.in-un*, however, cannot be interpreted contrastively despite the particle ‘-nun’ attached to it because its DoC is invalidated by the intervening (head of) *Minji-nun* (**Assumption VII(iii)**). As a result, *wa.in-un* in Spec-C loses its contrastive meaning (**Assumption VI(iv)**), being interpreted as P-Topic.

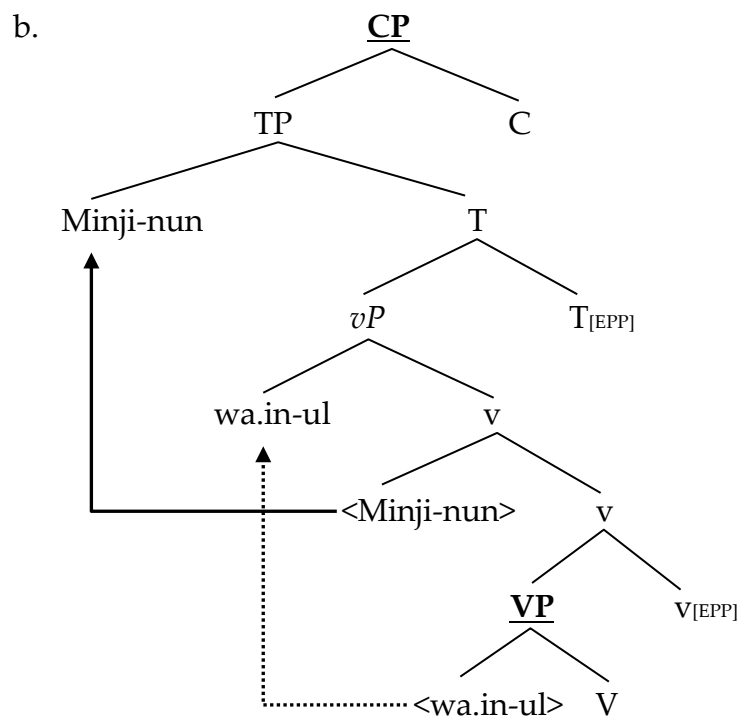
5.4.4 [NP1_{Cont} NP2]

The construction [NP1_{Cont} NP2] is also divided into two different subtypes, depending on whether NP1 is the subject or the object. We first discuss the derivation where NP1 is the subject and then discuss the other derivation where NP1 is the object.

5.4.4.1 [Subject_{Cont} Object]

Consider (30):

- (30) a. Minji-nun wa.in-ul cohahanta
 M.-Cont wine-Acc likes
 'As for Minji, it is wine that she likes (but as for Chelswu,).'
 [Minji = C-Topic, wa.in = I-Focus]



In(30b), the subject *Minji-nun* moves to Spec-T to satisfy the EPP-feature of T and the object *wa.in-ul* moves to Outer-Spec-v to satisfy the optionally assigned EPP-feature of v. The relevant DoT for calculation of Topic and Focus at the CI-interface is CP. In it, the contrastively marked subject *Minji-nun* is interpreted as C-Topic because 1) it is c-commanded by no other NP in the specified DoT (**Assumption III(i)**) and 2) there is no intervening (head of) NP of the same kind between *Minji-nun* and its copy (**Assumption VII(iii)**). The object *wa.in-ul* is interpreted as I-Focus because 1) it is c-commanded by the subject *Minji-nun* (**Assumption III(ii)**) and 2) it bears no Contrast particle (**Assumption IV(ii)**).

As discussed in Chapter 4, the contrastive meaning of C-Topics as that of *Minji-nun* in (30) can be ‘suppressed’ by contextual cues (or pragmatic factors) if the cues are specific enough to do so. If such a contextual cue is provided, the C-Topic *Minji-nun* loses its contrastive meaning, being interpreted as non-contrastive P-Topic:

(31) (Context: *Tell me about Minji. What (kind of alcoholic drinks) does she like?*)

A: *Minji-nun wa.in-ul cohahanta*

M.-Cont wine-Acc likes

‘Speaking of Minji, it is wine that she likes.’

[Minji = P-Topic]

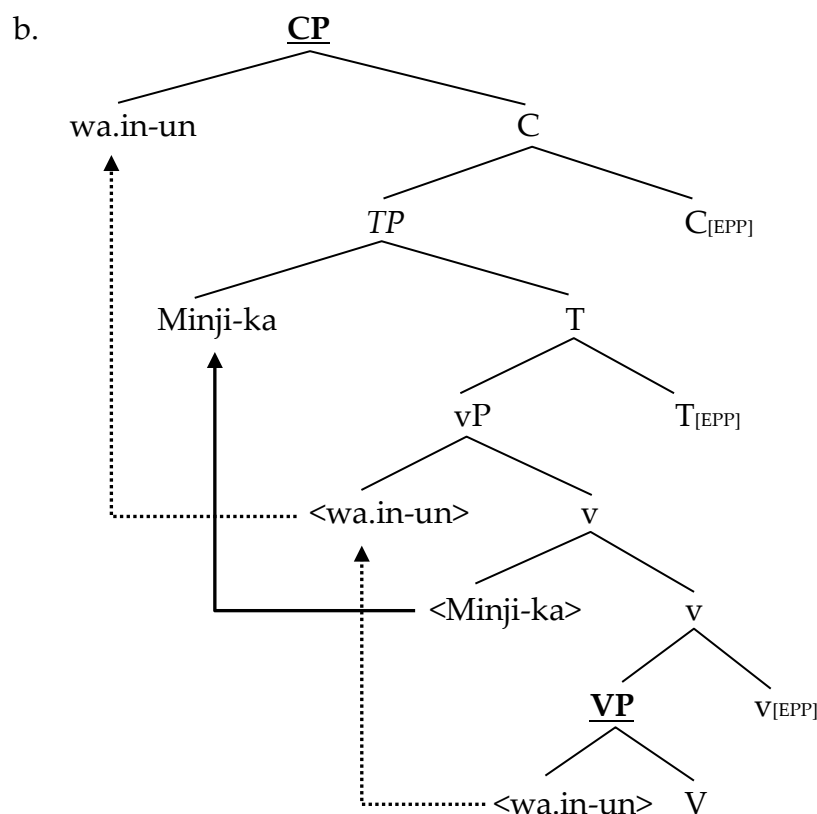
It should be noted, however, that the role of pragmatic factors such as the specific contextual cues in (31) is still limited in altering the meaning of an NP that has already been calculated for and interpreted as Topic or Focus at the CI-interface; they can suppress the meaning of Contrast of such an NP but they cannot, for example, suppress the Topic or Focus interpretation that has already been calculated and determined at the CI-interface. In other words, the effect of

pragmatic factors is ‘minimal’ on the interpretation of NPs whose topic or focus interpretation has been already determined at the CI-interface. As will be discussed in Chapter 6, however, the effect of pragmatic factors can be maximized so that they can force an NP to be associated with a focus interpretation if the NP has not been associated with such a reading at the CI-interface.

5.4.4.2 [Object_{Cont} Subject]

Consider now (32a) and its derivation in (32b):

- (32) a. wa.in-un Minji-ka <wa.in-un> <Minji-ka> cohahanta
 wine-Cont M.-Nom likes
 ‘As for wine, it is Minji who likes it (e.g., but as for whiskey,).’
 [wa.in = C-Topic, Minji = I-Focus]



The relevant DoT is CP where (the head of) both NPs are located. The object *wa.in-un* in Spec-C is interpreted as C-Topic at the CI-interface because 1) it is c-commanded by no other NP in CP (**Assumption III(i)**) and 2) it is marked contrastively (**Assumption IV**). The subject *Minji-ka* is interpreted as I-Focus because 1) it is not contrastively marked (**Assumption IV (ii)**) and 2) it is c-commanded by the object *wa.in-un* (**Assumption III(ii)**).

As discussed in the previous section, the contrastive meaning of the C-Topic *wa.in-un* in (32) can also be suppressed by pragmatic factors as exemplified in (33):

- (33) (Context: *who likes wine?*)
 A: *wa.in-un Minji-ka cohahanta*
 wine-Cont M.-Nom likes
 ‘Speaking of wine, it is Minji who likes it.’
 [*wa.in* = P-Topic]

As shown, the context given in (33) limits possible Topics to *wa.in*, i.e., the given context is specific enough to suppress the contrastive meaning of the Topic *wa.in-un*.

Chapter 6

Summary and Concluding Remarks

6.1 Summary

In this dissertation, I have investigated how a topic or focus interpretation of NPs in Korean is encoded in the syntax and how it is interpreted as such at the CI-interface. Contrary to the prevailing analysis in the literature, my analysis depends on neither independent syntactic projections (e.g., TopP, FocP) nor syntactic features (e.g., [-foc], [+top]), but instead makes use of 1) the presence of a contrastively marked NP in a domain transferred to the CI-interface (DoT) and 2) structural hierarchy between NPs within the same DoT. In Chapter 4 and 5 where the main assumptions, proposals and structural analyses are presented, I have argued that a DoT must contain a contrastively marked NP for an NP in the DoT to be able to be calculated for a topic or focus interpretation at the CI-interface. Given the presence of such a contrastively marked NP in DoT, I have argued that an NP is interpreted as Topic if it is c-commanded by no other NP in DoT, while an NP is interpreted as Focus if it is c-commanded by another NP in DoT. For the distinction between C-Topic and P-Topic, I have argued that an NP that is calculated as Topic is (further) interpreted as C-Topic if it is marked with the Contrast particle ‘-*nun*’. I have also shown two cases where *nun*-marked NPs lose their contrastive meaning: one case is where contextual cues force non-contrastive reading, and the other is

where the presence of an intervening *nun*-marked NP2 between a *nun*-marked NP1 and its copy invalidates DoC of NP1.

6.2 Concluding Remarks

As emphasized at the outset of this dissertation, the scope of our discussion is limited to typical transitive constructions which contain two NPs, the external and the internal argument. Limitations in scope, however, cannot be a justification for questions beyond the scope. Hence, I will address in this section one of those beyond-the-scope questions and present some speculation on it, leaving many other (important) questions and problems for future research.

Before we begin, let us first consider the most pivotal premise in our analysis:

(1) **Premise**

Calculation of Topic or Focus in a DoT is possible at the CI-interface only if the DoT contains a *nun*-marked NP.

As discussed throughout, it is assumed that an NP in a clause cannot be associated with either a topic or focus interpretation at the CI-interface if the clause does not contain a contrastively marked NP. We further argued that an NP, which is not associated with a topic or a focus interpretation, is understood as a constituent that constitutes ‘Sentence-Focus’.

Let us now consider some intransitive constructions, which are beyond the scope of this dissertation, to see if the premise in (1) on which our analysis heavily relies can still be maintained.

- (2) Minji-nun haksayngita
M.-Cont student.is
'As for Minji, she is a student.'
[Minji = C-Topic]

Although intransitive constructions as in (2) contain only one NP, our analysis correctly predicts that the sole NP *Minji-nun* is interpreted as C-Topic because 1) it is c-commanded by no other NP and 2) it is *nun*-marked (**Premise (1)**). More challenging is the intransitive constructions such as one in (3) below where the only available NP is not marked contrastively:

- (3) Minji-ka haksayngita
M.-Nom student.is
'Minji is a student.'
[Minji = neither Topic nor Focus; part of Sentence-Focus]

Since there is no contrastively marked NP (i.e., a *nun*-marked NP) in (3), our analysis predicts that the subject *Minji-ka* cannot be associated with either a topic or a focus interpretation at the CI-interface and it is thus interpreted as a constituent that is part of Sentence-Focus, which is correct for (3). A problem arises, however, when the subject *Minji-ka* is interpreted as I-Focus in certain cases, despite the absence of a contrastively marked NP which we assumed is a necessary element for calculation of Topic or Focus at the CI-interface. Consider (4):

- (4) (Context: *who is a student?*)
A: Minj-ka haksayngita
M.-Nom student.is

‘It is Minji who is student.’
[Minji = I-Focus]

The subject *Minji-ka* in ((4A)) is (or must be) interpreted as I-Focus as it provides information about *who* in the question. Obviously, however, there is no way for our analysis to be able to predict this I-Focus reading of the subject *Minji-ka* because (4a) does not contain a *nun*-marked NP (**Premise (1)**). We discussed in Chapter 4 and Chapter 5 similar cases where an NP receives a different interpretation from what our analysis predicts. Consider (5):

- (5) a. *Minji-nun wa.in-ul cohahanta*
M.-Cont wine-Acc likes
‘As for Minji, she likes wine (e.g., as for Chelswu, he like ...).’
[Minji = C-Topic]
- b. (Context: *Tell me about Minji. What (kind of alcoholic drinks) does she like?*)
A: *Minji-nun wa.in-ul cohahanta*
M.-Cont wine-Acc likes
‘Speaking of Minji, she likes wine.’
[Minji = P-Topic]

Our analysis predicts that *Minji-nun* in (5a) is interpreted as C-Topic at the CI-interface because 1) it is c-commanded by no other NP (i.e., Topic; **Assumption III(i)**), and 2) it is marked with the Contrast particle ‘*-nun*’ (i.e., Contrastive as well as Topic; **Assumption IV(i)**). Contrary to our prediction, however, the same subject *Minji-nun* in (5b) is interpreted, not as C-Topic but as P-Topic; its contrastive meaning is lost. We attributed this loss of contrastive meaning of C-Topic to the effect of contextual cues, i.e., we argued that the contrastive meaning

of C-Topic NPs is ‘suppressed’ when contextual cues are specific (or strong) enough to do so. In other words, (specific) requests such as ‘*Tell me about Minji*’ in (5) force a *nun*-marked C-Topic not to be interpreted as contrastive. I suspect that something similar is going on in the interpretation of the sole non-contrastive NP in intransitive constructions, although the effect of contextual cues in this case turns out to be opposite in that it does not suppress but ‘brings about’ a certain interpretation. So construed, we can argue that the non-contrastive NP in intransitive constructions is interpreted as part of Sentence-Focus, as our analysis predicts, unless contextual cues force otherwise. In (4), such forcing contexts are provided and therefore I-Focus interpretation is promoted in the interpretation of *Minji-ka*.

Let us consider the issue from a slightly different angle. Korean, along with Japanese, has long been considered one of the so-called Topic-prominent languages (Li and Thompson 1975). Topic-prominent languages are characterized by the pivotal role of Topic (a contrastively marked NP in our terms) in structuring sentences. If 1) Korean is indeed a Topic-prominent language, and 2) the presence of a contrastively marked NP is crucial, as we assume, for an NP to be calculated for a topic or focus interpretation at the CI-interface, it is not unreasonable to expect the sole NP in intransitive constructions to be more likely to be contrastively marked rather than Case marked, unless contextual cues force otherwise. The following examples seem to support the speculation:

(6) English: *John is a syntactician*.

Korean Translations:

a. John-un syntactician-ita

J.-Cont syntactician-is

[John = C-Topic]

- b. John-i syntactician-ita
- J.-Nom syntactician-is
- [John = neither Topic nor Focus]

If presented (verbally or in a written form) without any contextual cues, the English sentence in (6) can be, in principle, translated in two different ways. In (6a), the subject *John* is contrastively marked with the Contrast particle ‘-nun’, while it is Case marked with the Nominative Case particle ‘-i’ in (6b). Of interest is the fact that (6a) is conceived as a more natural translation than (6b) for the given English sentence. In other words, having an NP contrastively marked is preferred to having it Case-marked (or non-contrastive), unless contextual cues mandate otherwise. But why is that so? Why does the use of a contrastively marked NP sound more natural than that of a non-contrastive NP? What is special about contrastively marked NPs? I suspect that it is because the presence of a contrastively marked NP is what establishes or triggers a topic or focus interpretation in Korean. As a Topic-prominent language, Korean prefers to have a contrastively marked NP in a sentence so as to structure the sentence in terms of Topic or Focus. Further support for the preference to have a contrastively marked NP comes from the studies on the *be*-insertion errors observed in Korean learners of English as a foreign language (EFL) at their early stage of acquisition (Hahn, H.-R. 2000, Shin, J.-S. 2001, Ahn, S.-H. 2003, Choi, I.-C. 2013).

- (7) a. *This boy *is* play piano.
[Intended meaning: This boy plays the piano.]
- b. *The girl is very very like dog
[Intended meaning: The girl likes dogs]

c. *Stan is sharp teeth

[Intended meaning: Stand has sharp teeth.]

Hahn, H.-R. (2000) observes that at early stages of acquisition, Korean EFL learners tend to produce (ungrammatical) sentences as exemplified in (7)¹⁵ where an inflected form of the verb *be* is inserted after the subject. Such an excessive and prevalent insertion of the verb *be*, according to Hahn, persists until the learners advance to a highly advanced level. Shin, J.-S. (2001) and Ahn, S.-H. (2003) argue that the erroneously inserted verb *be* corresponds to the Topic marker ‘-nun’ (the Contrast particle in our terms) in Korean, which they argue results from the effect of Topic-prominent characteristics of Korean. I suspect that the insertion of *be* is another instance that shows that Korean utilizes a contrastively marked NP to structure a sentence in terms of Topic or Focus if no relevant contextual cues are provided.

Many other questions, of course, remain unanswered and future research is thus necessary.

¹⁵ As indicated in each intended meaning, the sentences are not intended to be progressive.

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